TEACHERS COLLEGE RECORD

VOL. IV NOVEMBER, 1903 NO. 5

THE PHILOSOPHY AND PSYCHOLOGY OF THE KINDERGARTEN

INTRODUCTION

The American school system, as a system, is defective in that its constituent parts are not sufficiently related to each other. In theory each grade is introductory to the grade next succeeding, and we pride ourselves on having an educational ladder reaching from the kindergarten to the university. But the college overlaps the university at one end and the secondary school at the other. There is complaint of a serious break between the secondary school and the grammar school; and between the elementary school and the kindergarten is a gulf which few teachers attempt to span.

The chief cause of such defects are not far to seek. The college and its preparatory school are old foundations. Historically they form the original educational ladder in American education. The university, a comparatively recent importation, is an extension upward, the use of which we have not yet fully discovered. The public elementary school with its own high school extension and kindergarten base, is an entirely different ladder, and there be many who prefer to climb up that way. The trouble comes when those on the new ladder try to shift to the old, or when we attempt to splice the two. Perhaps the most serious difficulty of all arises from the fact that these two means of educational ascent are constructed on radically different principles.

There is one theory that finds expression in the old order; another theory that underlies the new order. The college and its preparatory school were never intended for all who needed schooling. The public school excludes no normal child.

How can the two ideals be included in any well-defined system of education? But public opinion in this country demands of the American school system a solution of precisely this problem.

It is obvious that no satisfactory solution can be found until we have an educational philosophy broad enough to comprehend the real needs of all the people, and teachers intelligent enough to cope with all sorts of educational conditions. Principles of education to stand the test must be good and valid everywhere. Practice cannot be justified by tradition, or eccentricity excused on appeal to authority. There is no room in American education for blind adherence to a cult or unreasoning devotion to a master. A philosophy of education, whether embodied in the practice of a good teacher or expressed in the words of a great writer, is worthy of our profoundest study. Such study is valuable for the insight it gives into that which is universally true as well as for the understanding of that which is temporary and circumstantial. A study of Froebel's philosophy, therefore, such as is presented in this number of the TEACHERS COLLEGE RECORD, has for its object an exposition of that which has permanent significance and value in his work and, from inference largely, an explanation of what belonged peculiarly to his age and environment. If he has given to the world anything that is universally true it should be known and recognized by all teachers — not merely by those in the kindergarten; and kindergartners should learn, on the other hand, that principles of education, however true and universal, will show a diversity in application corresponding to the diversity of human needs. It is the spirit, rather than the letter, that giveth life. And in it all the truth is the main thing. Whether it be reached by insight or by scientific research is of little moment. But it is of supreme importance to the teacher that he be open-minded, eager to learn what is true and ever ready to reject what is shown to be false.

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THE PHILOSOPHY OF FROEBEL

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In attempting to present a general view of the philosophy of Froebel without entering into too great detail, and at the same time without making too great use of the technical language of philosophy, there will almost inevitably be left much to be desired in completeness and fidelity of impression. Froebel's educational system presupposes a definite philosophical creed, the appreciation of which is essential to an adequate insight into his theories and their concrete embodiments. It cannot be said, however, that Froebel ever succeeded in giving to his thought the rounded completeness of scientific system. In the same paragraph it is possible to find intermingled profound philosophic insight, intuitions recalling those of the mystics, and deep religious aspiration. The failings of his philosophy as a completely organized unity of thought may be readily accounted for by the nature of the man as a thinker and the historical accidents of his career. His work is more personal than most systems. For him as for Fichte philosophy is more than mere theory; it is the expression of deep personal conviction, and as such accomplishes its true purpose only when it becomes a power in the life. Much as he may have desired to do so, by the very constitution of his intellect he was unable to work out in a strictly logical and systematic way the nature and implications of the ideas which possessed his mind and dominated his activities. Throughout his entire work may be recognized the master light of all his seeing — the influence of one and the same philosophic effort and spirit. But such unity as we discover in his life and writings is not that of logical system; it is rather of that more fruitful character through which his work is saved from the curse of barrenness, a unity of tendency and endeavor.

The plan adopted in this article will therefore, it is hoped, furnish a brief but more or less systematic exposition of Froebel's

views concerning the world and man in their mutual relations, in order that by gathering together and focussing attention upon these we may have before us the philosophic basis of his educational doctrine and of those principles which still survive as recognizable features in the educational theory of the present. There is much omitted that should appear in any complete treatment of Froebel's philosophy, and in many cases it has been omitted arbitrarily. The article aims to give in outline the philosophic setting of certain phases of Froebel's educational theory which are to be developed in articles accompanying this one. Having come to some agreement concerning the nature and implications of the fundamental principles which are developed by Froebel, it may be possible to recognize what remains for subsequent efforts at a more precise statement of those principles and a more adequate solution of the problems raised by him. When we have understood Froebel, we may get beyond him, but not till then.

It is, of course, as Schopenhauer maintained, much easier to point out the mistakes in the work of a great mind than clearly and fully to unfold its worth. The mistakes are individual and isolated; while it is of the very nature of genius to give to its work an excellence that makes it impossible to be fully comprehended and demonstrated. Even the errors, indeed, of such a writer as Froebel can be understood only by doing justice to the truth which underlies them. It is quite another thing, however, to maintain the finality of his doctrines. It cannot be permanently our business to accept Froebel's system without qualification, or at least adequate interpretation in the light of the results of later science and experience. It is at the same time all important that the fundamental truths of his thought shall be rationally preserved, and that, in the process of casting off its outworn forms, its vital essence and spirit shall neither be lost nor even for a time impaired. As Green of Oxford said of the system of Hegel so may we say of the system of Froebel, "It will all have to be done over again." Yet in this very process of transformation the fundamental character of his thought will be more fully recognized and its permanence more completely assured. The dominant idea in all Froebel's work is as hostile to an unwise conservatism as it is to a dogmatic criticism and meaningless reaction.

I.

In spite of his originality of thought and his reaction against existing practice, Froebel was fundamentally what he was through an unconscious assimilation of his spiritual environment. No genuine philosophy is isolated, and in Froebel a general principle of thought that was working itself out more or less unconsciously in his contemporaries came to consciousness. His philosophy is in essential agreement with the system of thought known as Idealism, which formed such an important part of the intellectual life of the Germany of his day. The ideas put forward in rapid succession by Kant, Fichte, Schelling and Hegel had quickly precipitated themselves into well-defined ways of viewing the world and human life. The solutions of problems advanced by these four men were quickly accepted as axioms and, by the time Froebel had reached the age of serious reflection, had become regulative principles in the thought of the time. In some points Froebel resembles Spinoza, Leibnitz and Kant; in others Schleiermacher, Fichte and Hegel; he had learned something from Goethe and Winckelmann; from Comenius, Rousseau and Pestalozzi; but perhaps the most striking resemblances have been noted between his thought and that of Schelling, with the latter's disciples, Novalis and Krause. For the work of Krause Froebel seems to have had most liking, and from him it would appear borrowed a considerable amount of his technical phraseology. He was not, of course, an adherent of any particular school; and yet his entire thought took form and color from the spiritual atmosphere in which his intellect worked and in which, in spite of its apparently isolated character, his entire life was passed. In order, therefore, to appreciate with any degree of completeness the various elements of his thought it will be well to study briefly the general character of this idealistic development, noting its problems and indicating as clearly as possible the solutions offered, — but only so far as it seems advisable for understanding the philosophic background of Froebel's own life and work. This movement of idealism attempted to unify the world and human life, and its key-note was 'the grandeur and dignity of man.' It had its origin in a reaction against the thought of the preceding era, which also had taken as its watchword 'the grandeur and dignity of man.' We shall therefore, first of all, briefly compare these two types of

thought in order to trace, if possible, the source of certain of Froebel's problems, to understand better the larger issues involved, and to recognize his own clear insight into the true nature of the individual, not in isolation as Rousseau would have it, but as a part of the wider organism of humanity as Kant and Hegel contended. Froebel has given us the educational implications of that great movement of thought, begun by Kant and carried to its completion by Hegel, which sought to discover the unity of all life, of nature and humanity, in the Absolute Spirit,—a movement of thought which is in substantial agreement with that other great criticism and interpretation of life begun by Socrates, carried forward by Plato and brought to its fuller completion by Aristotle.

The eighteenth century, like its predecessors, had its good as well as its evil. It is customary among writers to regard it as the era of individualism and atomism, and even in a sense of atheism, in politics, philosophy and theology. It was an era in which man's mind broke with authority, civil and ecclesiastical, and refused any longer blindly to submit to the past. Now at length man was to enter into his rights as an individual and all that this present world affords. The sciences were eliminating the supernatural from life, and placing man anew in relation to the universe of things. Heaven was withdrawing from earth and man was once more thrown upon his own resources. If he was first among his fellows, it was a primacy among his fellow-animals. The mechanical was substituted for the spiritual, the reign of law for the illusion of freedom. The state came to be regarded as merely an aggregate of individuals obeying a ruler whose power they had themselves bestowed, and who could not therefore very well claim their allegiance as a divine right. The church was suspected as well as the state, and the one came to be regarded as the ally of the other in the oppression of the individual. The proper study of mankind was man, and the Deity, whose existence, indeed, as 'Supreme Being' was conceded, was nevertheless so far removed from man that He could no longer awaken the latter's reverence, much less inspire his affection and his love.

The period of the Enlightenment, however, while destructive in so many of its aspects yet contained the conditions of a new and fuller reconstructive effort. It involved, no doubt, a temporary loss to the spiritual life, but in retrospect it may be viewed as a necessary stage in the development of the human mind in self-

knowledge and self-discipline. Its significance for philosophy, for science, for literature, for politics is coming to be understood. We are only beginning to realize its larger significance for educational theory and practice. If the king was unable any longer to assert his divine right, the individual had become conscious of his rights as a human being. If the church had lost in authority, the individual had gained the right to think and act according to the light of intelligence and conscience. If the imagination was forced to range less high than hitherto, wider areas in the fields of science and industry were opened to its activity. If poetry was for a time to feel the lack of the spiritual element, it was but for a time; the compensation had come in the deeper sources disclosed in nature and in the heart of man. If God had been for a time forgotten or declared unknowable, it was only that the divine in man might become more fully manifest, and self-reverence and self-knowledge once again become the proper study of mankind. If social ties seemed to be weakened, it was only that a deeper sympathy with humanity might become their more secure foundation. If the world the individual had hitherto known seemed broken into fragments, yet Goethe and Kant were soon to issue the command, 'In thy own soul build it up again.' The thought was gaining ground that the individual is more than that which limits him. For the individual to be conscious of a limit is in a sense to transcend it. But it is not the mere atomic, particular individual, hitherto exalted and almost worshipped. Diderot's extreme reaction against law and authority contains its own refutation, and Rousseau, having shown the absurdity of individualism, acknowledged that the conditions of reconstruction are to be found only in the common reason and the general will; that men must look within themselves for the infinite they could no longer find without. The man who had railed so violently against all institutions at length came to realize that in the individual there is immanent a common reason and a general will which alone could help him to restore the broken unity of his life and once more unite him with his fellow-men and God.

It was not given to Rousseau to recognize the significance of this deeper conception. In the light of the manner of man he was, it would be unnatural to suppose that it could ever become the guiding principle of his thought. It was by Kant that this notion of a common reason and a general will was made the constitutive

principle of a system of philosophy which took for its province the great and fundamental problems of human experience. Kant had learned much from Locke, Hume and Leibnitz, as well as from Rousseau, and his work became a synthesis of the various tendencies of the eighteenth century of such a nature that a new philosophical movement was initiated; a movement, however, dominated by an entirely new method. The Critical philosophy has thus a retrospective as well as a prospective reference. It employs a new method in its interpretation of the problems and in the reconciliation of the systems which preceded it, and it has directly or indirectly determined the form of the various attempts at the solution of problems in all subsequent systems. To indicate somewhat more clearly the Kantian point of view it is indispensable to trace briefly its genesis in the author's mind. It has been noted that Kant was strongly influenced by Rousseau. He was as strongly influenced by Locke, Hume and Leibnitz. Indeed it may be said that the problem of philosophy took definite form in Kant's mind first of all through his attempt to reconcile the empiricism of Locke and the rationalism of Leibnitz. Locke, accepting as a fact the existence of the individual, thinking subject, proceeded to inquire how the individual becomes related to the wider universe of which he finds himself a part. He looked upon experience, the content of consciousness, as a sort of 'filling-in' of the individual mind, and he undertook to show in his famous Essay how this process takes place through the merely mechanical operation of a real world of material objects existing over against it. This results, he proceeded to show, in a collection of ideas in the mind which are sorted and arranged by certain faculties with which it is, strangely enough, endowed. The world of reality and the world of knowledge are thus dissevered, the mind restricted to its own subjective states, and the atomism of Locke makes the skepticism of Hume inevitable.

Leibnitz, on the other hand, attempted to provide for the relation of the individual to the world by means of his theory of monads. There is a sense in which it is true that the fundamental tendency in both Locke and Leibnitz is towards subjectivism and individualism. What Leibnitz worked for in his system was a consistent account of individuality and self-determination. But he is saved from pure individualism by his conception of the monads as in a way an embodiment of the universal. For Leibnitz

things do not as for Locke 'migrate into our consciousness,' nor does our consciousness go out of itself to enter into them. From one point of view, Leibnitz maintained, each soul is a separate world, sufficient for itself, independent of every other creature. Yet each monad reflects or rather ideally includes, while it really excludes the whole universe. The significance of Leibnitz's thought lies in the fact that he introduced into philosophy the principle of individuality, while still insisting on the necessity of the principle of universality. But between the individual and the universal he was not able to achieve a real synthesis.

In the preceding section it was stated that Kant learned from Locke, Hume, Rousseau and Leibnitz. They forced him to realize that his problem was the reconciliation of the individual and the universal, to show the true relation of the individual to the 'common reason' and the 'general will.' Though to all appearances beginning with Locke, Hume and Rousseau on the plane of individualism, nevertheless Kant shows in his earliest speculations the influence of his study of Leibnitz in the recognition of the individual as in himself in some way universal, or as a medium for the realization of a universal principle. More and more he was forced to the conclusion which is the very essence of the Critiques, namely, that while from one point of view we are to regard man as merely an object among other finite objects, part of the partial world of nature in space and time and thus a link in the chain of merely natural causation, nevertheless from another and truer point of view he is not a part or product of nature nor is he physically conditioned. In other words man as a self-conscious subject is to be regarded, Kant maintains, as raised above the chain of merely natural causation, and freed indeed from the ordinary limitations of space and time. For to him as conscious subject the world, including his own finite self, exists as "object of knowledge." He cannot be subject to the limitations of the world which is the object of his knowledge. As intelligence, therefore, man has within him a universal principle by which he is carried beyond the limits of his mere individuality.

In the moral life, moreover, a contrast of like nature is presented. As phenomenal, as realizing his life through the medium of a physical organism which links him with the animals, man is subject to the influences of pleasure and pain, of instinct

and desire. As noumenal, however, and as concious of a law of duty, which is recognized as the law of his own reason, and which he ought and therefore can obey, man is forced to recognize himself as a free personality, as a self-determining subject, borne above the impulsions of sense, the pressure of circumstance and the iron necessity of nature. From one point of view, accordingly, man is linked with nature, from another, he is united with the universal: on the one side there is limitation, necessity; on the other, the consciousness of an imperative of duty above all the claims of sense, and the consciousness of free self-determination. In man is the meeting-point of the natural and the spiritual, — intrinsically united as elements in the individual life. In this doctrine of Kant is discovered his first contribution to the reconciliation of the two tendencies between which the mind of the eighteenth century oscillated, the tendency to depress and the tendency to exalt the individual, — to make of him, as Aristotle would say, either an animal or a god. From his own dogmatic slumber, as he naïvely tells us, Kant awoke to the impossibility of losing sight of either aspect of man's nature, to the necessity of regarding him as both at once. He thus set the problem for which the science and philosophy of the century that has come and gone since his day, has been attempting to find an answer.

It has been said that Kant was the presiding genius of the spiritual life of the nineteenth century. In the estimation of competent judges his work has been placed on a level with the French Revolution as the most important influence in giving form and color to the culture of the century. It has modified and will continue to modify the whole system of beliefs theological, philosophical, ethical and educational, which have slowly grown up in the course of history. One reason for this influence is found in the fact that perhaps no thinker in modern times has held more ably than did Kant the balance between empirical and speculative ideas. The peculiar problem of the idealism which took its rise in his work was one of mediation and reconciliation of what were apparently irreconcilable antagonisms in the philosophy and the science of the preceding age. Materialism and Spiritualism, Empiricism and Idealism, Individualism and Socialism are but relative, different aspects of one truth. Through the influence of Kant and Hegel the finality of the principle of contradiction came to be questioned, and a tendency

was developed concerning two opposing doctrines, to inquire into the elements of truth in both, and to search for that deeper truth in which the apparent disparates might be reconciled. The working of this tendency has been noted in Kant's attempt to reconcile the particular and universal elements in knowledge and in the moral sphere. To put it briefly, Kant found that it is only through the common reason and the general will of humanity working in the individual that he can have an intellectual and moral experience. The principles which were to guide in this work of mediation and reconciliation, while implicit in Kant, were more distinctly brought to light and emphasized by his disciples, Fichte, Schelling, and Hegel.

From even the most superficial study of his work it will be recognized that Kant regarded will, or the practical reason, as constituting in a peculiar sense the essence of man. Kant conceives that the inner nature of mind "even as intelligence" is of free self-determining activity. The world we know is not so much made for us, as made by us, through the exercise of our own self-activity. The problem is no longer that of Locke, How does the world get into the mind? it is rather: How do we gradually build up or organize our own world? It was essentially the task of Fichte to bring to clearer consciousness the nature of this free activity of the self in knowledge and action, and to indicate more clearly its ethical implications. In this conception of the self, as fundamentally activity, Fichte recognized a principle upon which to build up his system of philosophy. The self is not something which has activity; it is activity. It is activity which issues out of and returns upon itself; only in willing, therefore, only through self-expression, does it become conscious of itself in its true nature. The realization of the self takes place through its own activity. What the self is to be, it must become for itself. The natural result is therefore that subordination of theory to practice, of thought to life, of knowledge to character, which received such wonderful emphasis from the life and the philosophic endeavors of Fichte.

The chief concern of Fichte lay in the sphere of the practical reason. His interest was entirely in the domain of the ethical. He emphasized such ideas as individuality, self-activity, responsibility. He cared little about nature; he went little further than to speak of it as Not-Me. On the other hand, Schelling's interest

was of a more realistic and aesthetic character. He attempted to give to Fichte's method a more objective application, and to unite with it Spinoza's more realistic view of things. Fichte had neglected to furnish a unitary view of things, and had not shown the deeper significance of nature for the human spirit. Schelling attempted to show that the manifoldness of nature is to be interpreted as the outcome of a single formative energy, which is the inner aspect or soul of nature. In it there is for Schelling, as for Spencer, a realization of the same principle, though unconscious, which manifests itself in man's consciousness. Descartes had regarded nature as the dead antithesis of conscious thought. Schelling regards both elements as fundamentally akin. "Matter," he says, "is the universal seed-corn of the universe, in which is wrapped up everything that unfolds itself in the later development." Nature is a reality the inner structure of which for Schelling is ideal; its origin and essence is spirit: it may therefore be exhibited in its essential oneness with mind as an intelligible system, as a function or process of intelligence towards self-consciousness as its necessary goal.

In the reaction against the individualism of the eighteenth century there developed a tendency in the philosophy of the opening years of the nineteenth century to the very opposite extreme. In the work of Schelling, the most prominent representative of this tendency, we find a type of thought practically amounting in certain of its phases to a revival of Spinozism. Against what he regarded as the extreme individualism of Fichte, Schelling maintained the unitary character of all things; that beneath all distinction there is an ideality, a unitary life or principle permanent amid all change. At times Schelling came dangerously near the position of Spinoza, in reducing all difference to mere appearance; but his uncompromising insistence on the idea of unity as underlying all difference, of the universal as necessarily prior to the particular, was essential, before the true nature and the fundamental implications of the organic view of the world could be apprehended. It remained for Hegel to bring into clearer light the principles implicit in the work of Kant, Fichte and Schelling. Briefly stated, Hegel's achievement consisted in showing more clearly than his predecessors had done what, according to Idealism, must be the character of that unity

which is the underlying principle, the indwelling life, of the realms of nature and mind. His work, even more consciously than that of Kant, is essentially one of mediation and reconciliation. His thought is thus linked with that of Goethe, Comte, Darwin and Spencer, and his work, as well as theirs, was dominated by two principles or ideas, the idea of organic unity, and, as implied in that, the idea of development. These two conceptions, it may truthfully be said, have been the source of the best thought of the past century; it is also true that they have been interpreted in different ways by these writers; but their true interpretation is that which contains the secret of their power, and in the long run such ideas are greater than the men who endeavor to interpret them.

The principal of Identity had been the watchword of the Pre-Kantian philosophy. Matter was matter and mind was mind; and mind and matter were absolutely opposed. From the influence of this principle even Kant, Fichte and Schelling had not been completely able to free themselves. Hegel reached the principle of his entire system by a consideration of the nature of self-consciousness, the implications of which had been but imperfectly grasped by Kant and Fichte. Hegel discerned more clearly than his masters that the deepest insight of the Critical philosophy is that the Absolute is not substance, but self-conscious spirit; that is, the unity of self-consciousness is the principle to which all things are to be referred, and in which they must ultimately find their explanation. To this result all previous philosophy tended. Plato, Aristotle, Kant, Fichte and Schelling (to name merely those who were more conscious of the tendency than others) all worked towards that Idealism which finds the interpretation of reality in self-consciousness. Conscious spirit is the ideal end and real presupposition of the world. In other words, if there is a universe, a cosmos, God is; and God is spirit because the universe exists.

Hegel, therefore, takes as his starting-point the conception common to Kant, Fichte and Schelling, namely, that self-consciousness is the unity to which every manifold must be referred. But he was the first to recognize clearly that self-consciousness itself is founded upon difference, that its unity is not mere empty, blank oneness; it is rather essentially a many-in-one, an organic whole; a unity, indeed, in which the opposition between the self

and the external world is overcome. From Schelling he had learned to recognize that absolute distinctions are unmeaning and that the only real differences are differences within a unity. Philosophy demands, therefore, such a mediation of opposites as will show thought and things, spirit and nature, the individual and society, freedom and necessity, reason and impulse, to be but relatively opposed and to be subordinated to one principle and reconciled in the movement of a living whole. Through their very oppositions and antagonisms there may be made to emerge a higher truth or larger life than had hitherto been realized. In this organic conception of reality no place for atomism remains. Every relatively independent existence implies the whole; only in relation to the whole of which it is a part can it exist or be truly known. In the organism of reality, through its manifold parts, a unitary principle reveals itself, and its parts in turn, just in so far as they are independent, are organisms.

The world of reality, moreover, for Hegel, is not a natural but a spiritual organism. The merely natural organism, while realizing unity in difference, is not commensurate with a reality in which self-consciousness is an element. It is to self-consciousness, therefore, we must look as the source of any complete interpretation of reality. Only in the unity of conscious mind do we seem to find all the antagonisms of the One and the Many overcome, or at least reduced to elements in the realization of its own life. In it intelligence and the so-called external world seem to come together. The world, therefore, is an organic unity which includes nature, but which reveals its essential character only in the life of man. The Absolute for Hegel is thus a spiritual self-differentiating principle, realizing itself in a world of difference which is no mere appearance but its own essential manifestation. There is, in reality, no passing over from spirit to nature. Reason or spirit is an organic unity, and the universe exists as the manifestation of that Reason. Reason is the immanent principle of the world. Nature, however, is not the mere co-equal of spirit. It is 'petrified intelligence'; thought externalized. It is implicitly, what consciousness is explicitly. Or rather, it is the necessary manifestation of spirit, in the sense that through nature spirit realizes itself. The universe is in externality, what God is in internality. Aristotle and Schelling found the principle of the world in Absolute Spirit as *pure* self-con-

sciousness, *pure form* opposed to the *finite world*. For Hegel, God is the Absolute Spirit which is being manifested in the world, through whom and to whom are all things. The process of spirit on its human side, accordingly, is a gradual approximation to God, and on its divine side, a gradual revelation of His own nature.

"Nature," says Hegel, "is in herself the process of the evolution of the spirit from her own bosom; and consequently embodies the spiritual presence throughout." However imperfect we may regard his achievement, Hegel's purpose in his philosophy of nature is to show how, starting from the conception of nature which regards it as pure externality in space, it manifests itself more and more explicitly through the rising spiral of mechanism, chemism and organism, until it unfolds its essential nature in mind. Thus in nature thought is objectified. Reason is the unifying principle of the world without and of the world within. Thus, too, nature is intelligible and man intelligent, that is, nature is organic to intelligence, and exists only in the life of spirit. The finite intelligence and the intelligible world are thus in living, organic dependence on the one living Spirit. Plato declared that God is without envy, and Hegel, in similar fashion, held that 'all that God is he imparts and reveals, and he does so at first in and through nature.'

One of Christianity's best gifts to philosophy was to show that nature, instead of being essentially evil and opposed to spirit is, in reality, the very means through which must be realized the highest spiritual life; that, in other words, nature exists for spirit. Hegel, more than any preceding philosopher, saw the implications of this truth. In this respect, Browning is in the realm of poetry what Hegel is in that of philosophy. It is this which gives to the philosophy of the one, as it does to the poetry of the other, its essential healthfulness and spiritual vitality. Nature, like mind, is rational, but through consciousness mind spiritualizes and informs nature as an instrument of its purposes. From this point of view, man at once completes and transcends nature. "All tended to mankind, and man produced, all has its end thus far." Born into the world at a certain point of time, man's life is a process by which, through thought and action, he virtually finds himself at home in the world. The idealism of the early years of the nineteenth century explains the possibility of man's fulfil-

ment of the command *γνῶθι σεαυτόν*, first to know and therewith to be himself, through the conception of the ultimate identity of the power without and the power within. It maintains, in other words, that the necessity, the machinery of nature and of the social institutions in which the human mind has expressed itself, is but the manifestation, the organic evolution of the same spiritual principle by which man is raised to conscious freedom. In humanity, in the spiritual life of man, moreover, is continued the revelation of the Absolute Spirit, which as Hegel says 'was begun in nature.'

II

There is a tendency in many quarters to look with suspicion on any attempt to show the intimate connection between a man and the age in which he lives. Such an attempt is felt to be in some way derogatory to one whose originality is freely acknowledged. What was said in the preceding section, it must be confessed, was put forward with the express purpose of showing that Froebel did not suddenly precipitate the world into a new sphere of thought: Kant himself did not not do this, however epoch-making was his work. To the true disciple of Froebel it should be a matter of satisfaction to realize as completely as possible the dependence of his thought on the labors of others, on the spiritual inheritance upon which he entered in the Germany of his day. The ruling ideas of his time, as we have seen, were the thought of the grandeur and dignity of man, and of the worth of the individual life; of the supremacy of moral and spiritual culture over mere selfish aggrandizement; of the person as a free, self-determining agent; of society as an organic and not merely mechanical unity; of the universe as the manifestation of a spiritual principle; of nature and humanity as forming one organic, spiritual unity. From one point of view Froebel lived a life apart; from another, he confided himself 'childlike to the genius of his age,' and became plastic to its influence. It would be a serious mistake, therefore, were we to limit our consideration of the historical background of his thought to the relations of which he himself was directly conscious. It is only in relation to its historic setting that we can truly comprehend and estimate the value and significance of his work. He was an outcome of

his age, and his very greatness consists in the fact that he was able through receptivity, patience, philosophic insight and constructive power, to discern and organize the educational implications of the most fruitful ideas in the philosophy, literature and science of his day and thus to originate a new epoch in education. To say, then, that the main current of his thought in spite of its occasional unevenness of movement, is in essential agreement with the results of the best philosophic inquiries of his age, is not to disparage Froebel; it should rather tend to give to his work its rightful place in our thinking.

Coming more directly to Froebel's philosophical foundations, the first point to be considered is his conception of Reality, or the world, as an organic unity. An understanding of the nature and implications of his unitary view of things is fundamental, if not initiatory, to any serious study of his educational theory. By temperament, and through the habits of mind he cultivated and the studies he pursued, Froebel was inevitably disposed to unify things, to attempt to realize the manifold of existence as a single process. From his earliest years he was impressed almost as strongly as the Italian Nature-philosopher Bruno, or the German mystic Boehme, with the idea of the All-unity, the All-life. Hegel regarded Reality as a movement of Absolute Thought; Froebel conceived of it rather as a movement of Absolute Life. Both, however, made the foundation of their thought practically the same spiritual monism. His system may be characterized as a humanized Idealism, or a spiritualized Naturalism. The evolution of his thought presents also certain elements of likeness with that of Schleiermacher in its tendency to regard the religious conviction of the unity of things as the final guarantee of the truth postulated by philosophy. This tendency of mind to unify things, partly poetic and religious, partly philosophic, might readily have inclined Froebel to pantheism, of which indeed he has been accused, had he not been saved from this by a strong ethical sense, and a certain intensity of nature which characterized him throughout life. To any system of atomism which regards a unity or whole as a mere aggregate of its independent parts, or of dualism which looks upon spirit and nature, soul and body as absolute disparates, or of deism which conceives of God as separate from the world, the thought of Froebel is absolutely opposed. There is for him an ideality beneath or beyond all dis-

tinction; the universe in spite of its multiplicity is one, and in spite of all its change is permanent. The ground principle of his thought is the nature of God or the Absolute, who is first of all the eternal law and life that lives and reigns in all things. He believes in a constant divine or orderly determination of the world. The universe by itself is plurality; at best an aggregate, a collection; it is the totality of being, conceived in its differentiation. But it is a universe or cosmos because it has its being in a spiritual principle, in God. The world and God, the *natura naturata,* and the *natura naturans,* are correlative, though not strictly correlative. The world without God would be chaos, and God without the world an empty phantasm. Froebel attempted therefore to reconcile in his doctrine the notions of immanence and transcendence. For him the Absolute is Force and Reason in unity. God does not work upon the world from without, however, but as the immanent life or essence of all things. "For nature, as well as all existing things, is a manifestation, a revelation of God. The purpose of all existence is the revelation of God. All existing things are only through and because of the divine essence that is in them."[1]

But while existence is a unity, it is at the same time a manifold. While there is the All-life, there are also the infinitely many individual forces. While there is the thought of continuous connection, there is the counterpart of this, the manifold elements in the organism of reality. Reality is an organic unity; a unity, that is, whose differences are its own determinations. It is a unity in which the universal and particular are inseparably combined; the parts themselves are characterized as such only through the whole; nor do they constitute it as a mere mechanical aggregate. For Froebel the Absolute, while a unity, is a self-differentiating unity, the truest analogue of which is to be found in self-consciousness which is at once self-differentiating and self-integrating. The movement is from difference to difference, from unity to unity. Just here Froebel is confronted with the old problem of the One and the Many. What must be his theory of the world as a real unity in which the elements possess a certain relative independence? From the ontological point of view, Froebel finds the reconciliation of the One and the Many, so far as he does find a reconciliation, in the

[1] *Education of Man*, pp. 151-152.

principle of the identity of the part with the whole. In some sense each part must contain the whole within itself. The force in each physical object is the world-force, the universal force, but in a peculiar phase; the reason in each human being is the Absolute Reason, but in particular form. His study of various, typical unities had forced Froebel to recognize that the essence of any organic unity is to be found in each element or member of that unity, whether natural, so called, or spiritual. Accordingly, every element or member of a unity, whether natural or spiritual, must be viewed in a twofold way: from the side of its independence, self-sufficiency and exclusiveness, as well as from the side of its dependence upon the larger whole of which it forms a part. Because of their origin in a common world-ground, all things constitute a living unity; a unity, nevertheless, in which each thing is also an individual, distinct from all others. Froebel maintained as strenuously as Leibnitz that there can be no real whole without real units. "Everything is of divine nature, of divine origin," he declares, ". . . Everything is, therefore, relatively a unity, as God is absolute unity." "There is nothing in nature which does not lead from every point to God as well as to man; there is nothing in nature which is not a part-whole, which does not show activity." "If there is everywhere in nature and life inwardly united coherence, the truth of which has been conceded by us, each individual must be in life at the same time a whole in himself and a part of a whole, — he must be a part-whole. The expression easily explains itself, as there is nothing in the surrounding world, and especially in nature, which does not justify this expression, which does not illustrate its truth."[1]

Closely connected with the idea of organic unity in Froebel's thought, indeed a corollary of the same idea, is that of development. The two ideas reciprocally supplement each other. An atomistic view of things had dominated the science, philosophy, theology, politics and education of the eighteenth century. Reality, from whatever side it might be viewed, was held to consist of isolated individuals, each one independent of the other. Unity and continuity in nature and human life were practically denied. The ideal of man was to free himself from the degrading conventions of the past, and give his real nature free play. But in the early years of the nineteenth century through the work of the

[1] See *Education of Man*, pp. 1-2, 151 ff.; *Education by Development*, pp. 244-247.

Revolution, of Kant and Schelling, of Goethe, Oken, von Baer and Lamarck, the idea that there is a continuity in the generation of all things had with remarkable swiftness triumphed over the notion of the hard-and-fast individualism of the preceding century. The very principles denied so vigorously in the one became the controlling forces in the thought of the other. The atomism of Rousseau gave place to the ideas of organic unity and development in Hegel and Froebel. Into the latter's conception of unity enter, as we have seen, the thought of manifold elements, individual existences and activities. To admit such differentiation within unity, implies a dynamic, not a static view of reality. The reality of the world implies the continuous self-determination of a spiritual principle, and the very self-determination involves the process whereby the world is maintained as an organic whole. It is impossible, therefore, to separate the thought of the evolution of the world from that of its existence. Existence is for Froebel, indeed, a veritable process of becoming. "God creates and works productively in uninterrupted continuity. Each thought of God is a work, a deed, a product; and each thought of God continues to work with creative power in endless productive activity to all eternity."[1] The world of reality is thus an organic unity in an unceasing process of evolution. It presents, according to this interpretation, the coëxistence and inner connection of manifold, individual members, and also their succession as the necessary stages in the evolution of spirit.[2] By evolution, Froebel understands, the tendency of any unity, absolute or individual, to differentiate itself into a manifold while still retaining its unity. The active or dynamic tendency in which spirit or force continually manifests itself, consists therefore in the two processes of differentiation and integration, which in coöperation constitute evolution. We find the process in the life of the plant, of the animal, of the individual, and of society. Through this process of evolution or development, the one passes into a manifold; in differentiating it individualizes and therewith also realizes itself. The various differentiations give opportunity for new integrations; and through these, higher, richer and more completely articulated unities arise.

This general *schema* of development is accordingly applied by

[1] *Education of Man*, p. 30.

[2] See *Education by Development*, pp. 258-262.

Froebel to both natural and spiritual processes, and with painstaking labor he illustrates it from every domain of life. It is to be found in the plant and animal; in man as a natural and spiritual being; in society and the life of humanity; it is the method by which the Creator himself has worked. He maintained, moreover, that while in the universe there is continuous movement, an unceasing change from one form of existence to another, there are degrees of reality, and that man is higher in degree than nature. There is an orderly and progressive movement upward from lower to higher levels of existence, from the inorganic, through the organic to the plane of the spiritual. Froebel is thus in agreement with Idealism in its contention that the so-called natural or physical world, simply because it is an intelligible world, presupposes spirit. If the soul of man is the final product of nature, yet it is the spiritual principle revealed in man that is the presupposition of nature. The creative process can only be understood in the light of its end; and if the end is to be our standard of interpretation, it is such because it was present in some form from the beginning. Froebel contends that the very fact that civilization exists goes to prove that the laws of the world, the adaptation of its manifold elements one to another, the progressive forms through which it passes in the course of its evolution, are an evidence that it is the work of the same rational power which expresses itself in man's consciousness. In man therefore the evolutionary process finds its goal. The various stages, however, are closely correlated with one another. The inorganic prepares the way for the organic, and the organic in turn for the spiritual. Man, therefore, is the last term in the evolution of nature, and yet different from nature; for in him the power that gives life to all things comes to consciousness, enabling him as a spiritual being to transcend nature.

In this connection it will be well to consider somewhat more in detail an element in Froebel's thought which has been the occasion of much misunderstanding and at times, it is to be feared, of over-elaborate analysis on the part of many among Froebel's disciples. For the extreme distortion of what is in reality a fundamental truth, Froebel himself is not wholly free from blame. It is moreover mere folly to maintain that in his so-called law of opposites he is extraordinarily original. In its larger aspect it is the doctrine fundamental to Christianity. In some form or

other, also, the "law of opposites" has been a commonplace in philosophy from the earliest times. Traces of it are to be found in the fragments attributed to Anaximander, Heraclitus, Pythagoras and Empedocles. These thinkers held to the doctrine of opposites or contraries, heat and cold, moist and dry, right and wrong, and so on, as explanatory not only of knowledge but of existence as well. The doctrine reappears in Plato. In the Metaphysics, Aristotle tells us that nearly all the early philosophers agree that 'the essence and reality of things are made up of opposites' and that the doctrine really fundamental to their thinking may be said to have been that the 'beginnings of existence are in contraries.' The fundamental form which this doctrine of opposites has taken in the history of thought is that of the One and the Many. As such the doctrine appropriated the name of Dialectic, a name originating with Plato, for whom it designates the process which brings the 'many' under the 'one,' and divides the 'one' into the 'many.' In this form the doctrine is found in Plato and Aristotle, and, though slightly altered, it reappears in Kant, Schelling and Hegel. In the former it is viewed as an ontological problem; in Kant it has taken on epistemological form, while for Schelling and Hegel it has once more assumed an ontological aspect. In his attempt to bring together and adjust the idea of organic unity and the idea of development, Hegel, as we have seen, was forced to recognize in all forms of existence a movement analogous to that of self-consciousness, — a movement of the one into a manifold, and the return or integration of the manifold in a higher unity.

Froebel, from the study of natural forms, from introspection and from an unconscious assimilation of a mode of thought very prevalent in his day, recognized this same principle of development, and the principle appealed to him with all the freshness of a new discovery. With Hegel he saw that in every form of development, natural or spiritual, there is a progressive mediation of contrasting extremes or opposites. All objects in nature undergo, he maintains, a triune manifestation, namely, in and as unity, in and as diversity, in and as concrete individuality. But, with Hegel, he also recognized that the true analogue of the development of any natural form, — indeed of the universe itself — is to be found in consciousness. In this Froebel is once more in essential agreement with the Idealistic position. "I con-

sider," he says, "the movement from analysis to synthesis, which I find in pure thought, as the type and law of all development. . ." "There exists no other energy but that of thought. The law of thought is the law of the Cosmos." In every concrete existence, therefore, the plant, the animal, or the mind of man, we find contrasts or opposites, and the interconnection of these. Beginning with undifferentiated unity, or unity in which differences are only implicit, the individual reality, whether natural so-called or spiritual, undergoes a process of differentiation; but in the very process of differentiation the bent towards unity or complete integration, inherent as the natural law of the individual, — the essential — asserts itself. The integrating or unifying principle, whether in nature or in mind, is active. The existing contrasts or differences are not left in isolation, nor are they annihilated; they return, as it were, to a center, and become constituent elements in a higher and more embracing unity. In the growth and development of mind each successive differentiation occurs on a higher level, with a higher power and fuller expression and wider range of meaning; while each successive unification is a whole complete in itself.

Thus Froebel's statement of the law of growth and development is practically that of Hegel and Spencer. With Hegel he had learned from Schelling that absolute distinctions or differences are unmeaning and that the only real differences are differences within a unity. A mere point of being without stimulus, antagonism, resistance, could not develop: on the other hand mere opposition, difference, antagonism, would lead to nothing. Froebel with clear insight perceived that all oppositions and antagonisms, if they are to further the development of any reality, must be 'subject to the guidance of an indwelling unity.' Without this there could be no absorption or assimilation on the part of the plant; without it there could be no mediation or reconciliation between the individual mind and will, and the universal mind and will of humanity. "Where mediation takes place," says Froebel, "there is always identity in some respect at the foundation of what is mediated, but the identity appears in the opposite way; or, in other words, mediation presupposes opposition in appearance, but identity in nature — that is, mediation can only take place between and with opposites which are yet identical." As we have seen when considering Froebel's con-

ception of organic unity and development, these distinctions, which any reality is forced to undergo in the course of its development, are ultimately to be explained as the necessary expression of that life which 'lives through all life,' and are not annulled by it.

Thus we find what is often spoken of as Froebel's fundamental purpose in his educational theory, namely, the unifying of contrasts, is, in reality, the purpose of all true growth and development, of life itself. The individual is a unit, but from every side a dependent unity, on nature, on humanity, on God. Nature is the first great opposite which has to be brought into vital relation with the mind of the individual. The mediation, as we have seen, is possible because the two are not merely mechanical disparates. The externality of nature is not absolute; it is not externality to consciousness, but an externality for consciousness. The consciousness of nature is thus an element in the process of self-consciousness. It is a term in the organic process of self-consciousness. Consciousness is not merely the counterpart of nature, and correlative with it, but in reality includes the process of nature as part of its own process. It was essentially Kant's work to show that for better or for worse each man builds his own world. So Froebel maintains that a man's world is of his own building. As organized through his intelligence and will it is a representation of the individual life. Not until man objectifies his personal being in his world does he attain to full consciousness: nor is there any nature that he understands save the nature that is of his own making. Thus it is that nature and the spiritual life of the individual become inseparable. In other words, it is through nature that spirit first of all realizes itself.

As an individual, in turn, man can be understood only as part of the larger organism of humanity, past, present and future. The same ideas of organic unity and development which dominate Nature are likewise operative in the life of humanity. Here again Froebel looks upon the individual and humanity through the analogy of the microcosm. He was unceasing in his opposition to the atomic view of society, a view which subsequent science and philosophy have alike rendered untenable. With Rousseau he would hold that the beginning and end is the individual soul; but his interpretation is the direct antithesis of

that made by the author of *Émile*. He conceived of humanity as an organism, and that like every other organism, it has growth and development as the law of its life. In an organic whole each part exists and maintains its proper nature only in and through the others. What may be called the community of the spiritual life completely dominated the mind of Froebel, a view which maintains that man is not, cannot be, a mere individual. There is a sense in which the word 'person' may convey a very inadequate impression of the essential nature of the individual as a spiritual being. From one point of view, the individual is set over against, and in antagonism with nature. But the opposition in both cases is relative, not absolute. As the consciousness of nature is an element in the process of self-consciousness, so also is the consciousness of humanity an element in the same process. In other words, in relation to both nature and humanity, the individual consciousness is essentially self-separative. It finds itself in what at first appears not-self, in transcending that which at first seems to be opposed. As a spiritual being the individual finds himself in truer and richer life only as he moves out of his self-centered, isolated life and enters upon his inheritance in the experiences and achievements of the race. Thus humanity, as was also true of nature, becomes a symbol in which the individual finds himself 'writ large.' But it is humanity past, present and future as well. Nor is the 'image in the soul' which the individual is to construct to be a mere copy. The representation is to be unique. "It is unspeakably pernicious," writes Froebel, "to look upon the development of humanity as stationary and completed, and to see in its present phases simply repetitions and greater generalizations of itself. For the child, as well as every successive generation, becomes thereby exclusively imitative, an external dead copy — as it were, a cast of the preceding one — and not a living ideal for its stage of development which it has attained in human development considered as a whole, to serve future generations in all time to come. Indeed, each successive generation and each successsive individual human being, inasmuch as he would understand the past and present, must pass through all preceding phases of human development and culture, and this should not be done in the way of dead imitation or copying, but in the way of living, spontaneous self-activity. . . Every human being should represent these phases spon-

taneously and freely as a type for himself and others. For in every human being, as member of humanity and as child of God, there lies and lives humanity as a whole; but in each one it is realized and expressed in a wholly particular, peculiar, personal, unique manner; and it should be exhibited in each individual human being in this wholly peculiar unique manner, so that the spirit of humanity and of God may be recognized ever more clearly and felt ever more vividly and distinctly in its infinity, eternity, and as comprehending all existing diversity." [1]

The educational implications of this conception, of the organic relation of the individual mind to nature and humanity, is one of the most fruitful influences in the entire thought of Froebel. The other articles of this series will treat this subject in greater detail. One phase of the educational significance of nature for the human spirit should, however, be noted in this connection.

Froebel looks upon both nature and the human spirit as manifestations of a spiritual principle, or as having their life in the Absolute Spirit. Nature is thus a symbol through which man sees a life to which his own is akin, a mirror in which his own spirit is reflected. He has found that nature's ways may be known; he has also learned to make it plastic to his purposes. The evidence of his achievements so far, is to be seen in science and civilization. The faith that has made both possible is the belief that the law and order operative in nature is within man's reach. The sense-appearances have become for the scientist, as for the common man, a significant language. The scientist treats the world as an interpretable world. Reading the book of nature man has established an intellectual affinity between his own intelligence and the intelligence working in nature. As the scientist has studied the significant language of natural causes more and more he has been led to maintain that the final outcome of that speculation commenced by the primitive man is that "the Power manifested throughout the universe distinguished as material, is the same Power which in ourselves wells up under the form of consciousness."[2]

Such also is Froebel's explanation of the community between the mind of man, and the power manifested in nature, yet signified to man by interpretable sensuous signs. Nature is for

[1] *Education of Man*, pp. 17-18.

[2] Spencer, *Sociology*, § 659.

him one vast symbol. With the common man and the scientist he regards the significant language of the cosmos manifested in sense-appearances as adapted to the education of human intelligence. But with the poet and the philosopher he would dare to venture beyond this position — he would press still further the analogy between the macrocosm and the microcosm. He conceives the Divine Spirit as embodied in the sense-symbolism of nature, just as the human spirit is embodied in and manifested through the physical body. It is in this view of the world, namely, that it is the manifestation of a spiritual presence throughout, and that all things therein differ only in the degree in which they possess and manifest the divine life, that the justification for Froebel's symbolism consists. Nature is a divine sense-symbolism adapted to the use and education of man. The lower forms find their realization in the higher, and the higher in turn include and reveal the true nature of the lower. Man's heart has felt where his intellect afterwards discovered the one life and power in all things, and the symbols he has created in art and religion give utterance to the fact. In the presence of nature, then, Froebel would hold, man is in the presence of a divine life, yet one akin to his own. "All natural phenomena," he declares, "are signs of spiritual truth to which they give expression; thus they may be called symbols. It is a quite different thing whether we look upon concrete things and facts as merely material things or facts serving this or that outward purpose, or contemplate them as the outward forms of spiritual control, the intermediate of higher truths and higher knowledge. In this sense the material world is a symbol of the spiritual world, and it is in this sense that education needs to use it, especially in leading the child to the ultimate cause of all things — God." [1]

The end or purpose of each individual life is to realize itself as an element of the larger organism of Reality, to come into harmonious relationship with nature and humanity in their organic unity and development, and with God, the immanent life of both. The realization of this end can be attained by the individual only through the exercise of his own activity or power of self-determination. "It is the special destiny and life work of man, as an intelligent and rational being, to become fully, vividly, and clearly conscious of his essence, of the divine ef-

[1] Von Bülow, *Reminiscences of Froebel* (trans. by Mann), pp. 227-228.

fluence in him, and therefore, of God; to become fully, vividly, and clearly conscious of his destiny and life work; and to accomplish this, to render it (his essence) active, to reveal it in his own life with self-determination and freedom." Thus Froebel is in agreement with Kant and Fichte in maintaining that the soul may become a self-conscious, self-determining power. What the self is, what it will be, it must become for itself. The actuality of the soul is for Froebel the unity of the inner and the outer; or as Hegel would say, the unity of essence and its manifestation. The soul must build its own world, its own representation of the macrocosm. Individuals are activities since they are in essence one with the spiritual principle immanent in all things. All things are ultimately manifestations of this principle. As manifested in nature we call this principle force; in the inner world we designate it mind. The life of the individual is a perpetual process through which the soul attains self-knowledge and self-realization. The soul is not a simple, resting identity; it is not something that has activity; it is, for Froebel as for Fichte, self-determining activity. Its life is self-produced. It is self-determining, moreover, in spite of, and yet by means of, opposition. The opposition of nature and society to the development of the intellectual and moral life of the individual is, as we have seen, only apparent. These indeed are the means by which this very development is rendered possible. The life of the individual is the process whereby he, in knowing the objective world, learns to know himself; and he realizes himself only as he becomes a part of the life of nature and humanity,—only as he becomes the agent of a divine purpose to which all things ultimately contribute. For Froebel, therefore, the course of the upward movement in the spiritual life is that of self-estrangement and self-surrender. Only through a continual process of self-surrender to the life of nature and of humanity does man attain to a consciousness of the latent wealth of the world within.

It is, of course, unnecessary to state that these three principles everywhere operative in Froebel's thought, unity, development, self-activity, the implications of which he was ever trying to work out and reconcile, must be understood together. For purposes of examination they are in a sense partially separable notions; in reality, they are inseparable. It is necessary, therefore, briefly to examine Froebel's conception of self-activity and

his attempt to reconcile it with the other principles of organic unity and development.

It may be admitted at once that Froebel did not spend any more time than did Hegel upon the abstract discussion of human freedom. The question did not present itself in the abstract form, "Is man free?"; at least it does not appear that he ever answered it with a simple "Yes" or "No." But to the concrete enquiry, "When, in what relations, and as what, does the individual with least hindrance and completest satisfaction carry out his will?" we have before us as his answer his entire educational scheme. Yet this does not altogether satisfy the legitimate demand of philosophy for consistency among principles regarded as fundamental. Is man free as a natural being, as Rousseau asserted, or is he free only as a spiritual being, as Fichte contended? On the one hand, Froebel regards nature as a "continuously self-developing whole. . . Its forms, in all the stages of their development, result from the operation of one and the same force. . . Man appears as the last and most perfect earthly being, in whom all that is corporeal appears in highest equilibrium and symmetry, and in whom the primordial force is fully spiritualized, so that man feels, understands and knows his own power." On the other hand, he regards it as the special destiny and life work of man "to reveal his essence in his own life with self-determination and freedom." The problem, therefore, that presents itself is this, How can the conception of an immanent God be reconciled with that of human free-agency, comprehended as meaning self-activity, profoundly and unqualifiedly real? How are we to reconcile the free, conscious organization of reason and will and the apparently necessitated and unconscious mechanism of the objective world? What reconciliation, moreover, can be offered between the theory of natural development of Rousseau, according to which education is to be subordinated to nature, with the view of education maintained by Fichte, which makes it a spiritual process through self-determination, but in and through the restraint of duty and the constraint of the moral ideal?

Although Froebel does not furnish any explicit answer to these questions when put in just this form, nevertheless there is by implication an answer which is practically identical with that of Aristotle and Leibnitz. The three regard freedom as con-

sisting essentially in spontaneity and intelligence. For Froebel, the divine effluence in each thing is the essence of each thing. Every form of reality to which the Absolute has communicated its inexhaustible life is endowed with the function of representing, each in its own way and according to its special nature and endowment, the whole sum of existence in which it has its being. Every real being, natural or spiritual, is to this extent purposive and self-active, and not merely mechanically conditioned. Each thing is striving to manifest its divine essence; it is the more or less adequate manifestation of the principle which underlies all reality. In the nature of its essence, and in its capacity for representing or manifesting this essence consists its individuality. Thus Froebel's thought is dominated by the teleological rather than the mechanical categories. In this he is ultimately in harmony with the consistent evolutionist who believes in evolution and not mere aimless change. A word of explanation may serve to make this clearer. The thesis is this: The consistent evolutionist, one who believes in something more than mere aimless change, in his explanation of things is forced to supplement the category of mechanism by that of teleology, to complement the category of force by the category of a final cause; thus bringing into his explanation the notion of a self-determining and purposeful activity. In speaking of an individual reality, it will, of course, be admitted that its individuality, at least in part, is constituted by the relation it bears to the whole. On the other hand it is something more than the mere sum of its relations to the other parts and the whole; for this conception, as Spencer emphasizes, would overlook the principle of activity by means of which its individuality is preserved in spite of the changes it is forced to undergo as part of the whole organism of reality. As part of this totality the immanent law or purpose of each individual reality is to manifest, or as Leibnitz and Froebel would say, 'represent' the whole, but each in its own degree and in its own way; and it is more truly individual the more completely it contains within itself and manifests the principle or purpose of the whole. The individual becomes one with the universal, the part with the whole, according to the comprehensiveness of the activity through which the inner law or purpose is manifested. In virtue of its fulfilling a purpose, then, for the evolutionist as well as for the idealist, every individual reality may be said to be free,

since it is not dominated by a necessity conceived as an external, compelling force. Natural objects do not obey laws of nature, except in so far as the laws are the modes of behavior of these objects; and for the scientist as well as for Froebel, the fundamental law, in this sense, of all finite forms is the law of development. In other words, for an ultimate explanation, both resort to the conception of final cause as put forward by Aristotle. For Aristotle, the real is not the actual as it first appears in time; but it is the law or ideal which is implicit in the actual, and which is present as the determining activity or principle of the process in which it is manifested. In virtue of the more inclusive character of his activity, man can identify himself with the universal, and manifest the purpose of the whole, more completely than existences lower than himself. In his capacity for self-consciousness the potentiality of freedom in the true sense is found. In man, according to Froebel, there is not merely spontaneity, but consciousness of self and intelligence. Although, from one point of view, man comes forth from nature and while he is one of the objects of nature, yet nature's laws are not forced upon him from without; in him rather is the natural activity of the law immanent in nature manifest on the highest plane of evolution yet reached; his future is nature's future, for through him nature's work is carried forward to its fine issue.

From another point of view, however, since nature becomes self-conscious in man, it is impossible not to regard him as something more than an object among the other objects of nature. In man, in virtue of self-consciousness, is manifested the principle of unity, through which all things not only are known but through which they exist. He is related to nature, but he is also in opposition to it. The reaction of consciousness upon the merely natural,— whether in sensation or impulse,— is the beginning of a new life,—the spiritual—a life to which the merely natural becomes organic and instrumental. Thus Froebel's thought implies the truth of the idealistic contention, namely, that the activity of the self is free and yet takes place according to a definite law. The history of humanity is therefore the story of man's gradual emancipation from nature, not in the sense of actual withdrawal, but in the sense that nature has become more and more, to use Schopenhauer's word, man's 'Idea.' In so far as man's knowledge has developed, he has been freed from the notion of

nature as an unintelligible influence operating upon him from without. Through his knowledge of nature, through nature becoming his 'Idea,' man has been freed from nature; he is less and less subject to nature; rather is nature more and more subject to him. This emancipation from nature is possible to man, because of his endowment of intelligence and will. In virtue of these the world for man is his Will and Idea. Because of his endowment man may grasp the law or principle of his development, which is, as we have seen, the ideal in contrast with the actual, and yet present in the actual as its living, active principle; and he is therefore able to set up ideals which are the essential conditions of his progress. It is in this sense that we may speak of his development as progress. The ideal for man, while in contrast with the actual, is not in contradiction with it. It is, in reality, the actual apprehended in its ideal, that is, true nature, as that towards which all prior development has been striving. This is also the significance of Hegel's much abused phrase, "the real is the rational." If it were not so, human progress would be impossible. Froebel, accordingly, recognized the need of keeping in view the two complementary truths: on the one hand that the spiritual evolution of the individual consists in conformity with the purpose that seems to be manifested in the world of nature and human life; and on the other hand, that the realization of this purpose can be brought about only through the free activity of man. Every individual, therefore, in virtue of his free activity, becomes a specific and original representation of reality, a compendium, or microcosm in which the world of nature and humanity is immediately reflected. Man's spiritual life, therefore, for Froebel, is not a gift from the hand of nature; it is an achievement; it is not an impartation, but the conscious realization of that which he has within him to become.

From what has been said concerning Froebel's notion of the general process of reality, his conception of the nature of the mind and its genesis will be readily apparent. Only a brief word need be said in this connection. With any view of the mind which looks upon it as a *tabula rasa* Froebel had no sympathy. For him the mind is a principle,—an energizing, organizing principle and is a product only in the sense that what it becomes is self-produced. It is erroneous to speak of parts of the soul or mind, as if the various parts were endowed with a quasi-

independence. Through its various forms of functional manifestation there is the one living, active principle,— a principle with manifold functions, but a unitary life. In the process of psychogenesis there is, as in other forms of reality, the evolutionary movement through differentiation to the higher integration. In the development, the two main phases are recognized by Froebel,— intelligence and will. These are inseparable aspects of one organic process. Or, to state it somewhat differently, the development takes place through the internal being made external, the external internal, and the unity of both discovered. In the process whereby the individual comes to consciousness of his true nature, and 'reveals it in his own life with self-determination and freedom' there is, on the one hand, the translation of the objective world — by sense-perception, imagination and thought — into subjective conception or 'Idea'; and on the other, an assertion and realization,— by impulse and will — of subjective ideas and purposes in the objective world. The first stage in this process is the establishment of uniform relations between the soul and the body,— the organization of the soul in the body, and of the body in the soul. The soul takes possession of the body, the one of the many. In this process, in accordance with Froebel's general notion of development, there is differentiation of organs and integration of function. The soul, it may be said, inwardizes the body, and the body in turn becomes an expression of the soul. Such is the process through which the first opposition is overcome. The soul appropriates the outer and makes it the sign and medium of its nature. From the first it is form-giving; it is creative in moulding its world of objects, and in ends which will satisfy its desires. The body, nature, social life, — these are the opposites which the soul has successively to appropriate in its gradual ascent to conscious freedom. It appropriates by recognition, limitation, coöperation. At first the soul is apparently immersed in nature; its end is to become spiritual and free. This is the "last of life for which the first was made." In the *Mother Play*, Froebel presents us the lowly beginnings of the human story; in the *Pedagogics of the Kindergarten* and the *Education of Man* the record is carried through the periods of childhood and boyhood.

It is a defect in Froebel's work, considered from the philosophical point of view, that it does not embody any serious

examination of the question as to the nature and possibility of knowledge. It does not appear that Froebel ever seriously realized the fundamental importance of such an enquiry. In the light of his conception of mind as an idealizing activity, and his view of reality as an organic unity, he is forced to regard knowledge as the "medium in which our world, as an interrelated whole" exists for the individual. Thus for him knowledge is the mental construction of reality. The mind is not externally determined by the object, in the sense that the object is set in mechanical juxtaposition, wholly unrelated, to the mind as a sort of knowing-machine; it rather finds itself in the midst of an intelligible world to which it is essentially akin and the fundamental forms of which are one with the forms of mind as intelligence. This conception of the knowledge process, while implicit throughout Froebel's writings, is nowhere adequately developed. He simply left the possibility of knowledge as an inevitable sequence of his general ontological theory, or in a form similar to that in which Romanticism as well as Leibnitz and his precursors had conceived it. Many passages might be quoted which would suggest what his doctrine would have been, had it been developed. So far as there is any positive development, it amounts to a combination of the notion of Empedocles, for whom the doctrine that "like can be known only by like" ranks as a universal rule applicable not merely to the region of sense-perception, but to the entire realm of thought; of the Stoic doctrine of the analogy between the macrocosm and the microcosm which found in man's nature the sum, or "quintessence" of the cosmical powers; and of the doctrine of Leibnitz that, since each individual is an epitome of the universe, it follows that the entire mass of knowable fact is contained implicitly in each individual or monad. "Man stands midway," Froebel declared, "between God and nature, between Creator and creature, on the one side as product of nature, belonging to the world of unconscious being, on the other side as mind destined to self-conscious being united with God, or mind from God's mind. Only because he carries within himself the essence of both, is he capable of knowing both, and is at the same time called upon to make manifest the Divine in the universe, as the Good, the True and the Beautiful."[1] This is, of course, to put the consciousness of the problem in the place of its solution.

[1] Von Bülow, *Reminiscences of Froebel*, p. 223.

Even if the general metaphysical position be granted, the theory of knowledge which is based upon it is an inference, but one not supported by a critical demonstration. His theory is suggestive, but it is not carried far enough. He finds in every living unity a reflection or manifestation of the larger cosmos. Every individual thing, according to its essential nature and each in its own way, thus becomes a representation of the divine life. Such is Froebel's conception, in brief, of the general life-process. In man, however, in virtue of self-consciousness, there is a unique manifestation of the ideal or divine nature of the world. The ideal nature of things, everywhere striving for utterance, in man comes to itself, comes to consciousness. As physical, man, on the one hand, "appears as the last and most perfect earthly being, in whom all that is corporeal appears in highest equilibrium and symmetry," but in whom, on the other hand, as spiritual, "the primordial force is fully spiritualized, so that he feels, understands, and knows his own power."[1] The idea of man as spiritual, accordingly, is the evolution of self-consciousness; this, from the very nature of things, is man's "special destiny and life work."[2] Since in man as microcosm is the meeting-point of a specific combination of elements, natural, human, divine, in the process of self-knowledge there is ultimately locked up all knowledge of the world and of God. The apprehension of truth, for Froebel, is not, therefore, the mere communication of it to the mind; it is rather the mind coming to consciousness of itself, or as Plato would say, "recollecting" itself. The evolution of intelligence is the development of the mind to the consciousness of itself and of all that is potentially in it. As conscious spirit the individual has within him the promise and potency of that upward movement, through which in coming to the knowledge of itself, the mind rises to the knowledge of nature, of man, and of God. Between the two unities, the "nature-given nether-soul and the spirit-won over-soul," lies the course of the spiritual life of man. Froebel recognized that for the development of self-consciousness,— in order that the individual may become a person,— the consciousness of nature and humanity is necessary. But he also maintained that in this same development the knowledge of God as the idea of the unity, presupposed in the opposition of the self

[1] *Education of Man*, p. 198.

[2] *Education of Man*, p. 2.

to nature and humanity, is involved. In other words, that the idea of God, just as the idea of nature and humanity, is part and parcel of the very structure and mechanism of consciousness. The truth appears to be, however, that in this instance Froebel did not fully recognize all the implications of this intuition, and missed the opportunity of strengthening in one of its weakest points his general position concerning the organic connection between the outer and the inner, between nature and mind.

III

In the preceding section an attempt has been made to give a more or less systematic account of the three fundamental principles which seem to be operative everywhere in Froebel's thought. These principles, though never developed in exact philosophic form in their mutual relations, are, nevertheless, always presupposed in the exposition of his educational doctrine. In order that the statement might not be too complicated, the educational implications have been for the most part avoided. It remains, therefore, to indicate in brief outline some of the more important of these implications, confining attention only to their more general statement. It is to be remembered, also, that the enquiry in this paper is directed primarily towards Froebel's thought as a philosophy of principles which obtain not for the so-called kindergarten period merely, but of principles that should obtain in all education.

The educational problem which was continually present to the mind of Froebel was, How to adjust the individual that is always implicitly more than a mere individual, to the larger life in which he must move and have his being. He recognized, as we have seen, that before this question can be answered intelligently a consistent doctrine of man's place in the cosmos, of the relation of the human process to the larger process of reality, is necessary. It is well, he would seem to say, to study the mind of the child, his instinctive equipment and his emotional attitudes; but the knowledge so obtained can have meaning and significance only when it is brought into relation with the knowledge of that larger unity of which the individual is a part. Froebel's first question, therefore, was not the psychological but the philosophical one; the question, namely, How to interpret the relation

between the inner and the outer, between the mind of man and the universe with which it is confronted. This question he answered, as we have seen, with full assurance. Human life, and hence the educative process, is possible and intelligible only on the assumption that both the self and the world, mind and nature, personality and environment have their origin and development in the persisting purpose of one, universal, spiritual principle; and only on the basis of such kinship between the essential nature of the soul and of that wider life upon which the soul enters, is it possible to render an account of the education of the human spirit.

Recalling, therefore, Froebel's conception of Reality as an organic, spiritual unity, we are brought face to face with what may be designated his two fundamental educational norms: the idea, on the one hand, of the development of the individual life as an organic unity, endowed with activity; and the idea, on the other hand, of its development through its dependence upon and participation in the larger organism of Reality. Throughout his enquiry this conception of the educational process as part of the wider life-process dominated the mind of Froebel. Life is evolution, development; education is directed, controlled, development. The very centre of Froebel's thought is the personality of the individual. From Fichte he seems to have gained a profound though somewhat mystical view of the nature of human personality; and his conception of the individual is, therefore, the direct antithesis of that put forward by Rousseau. Both support the claims of the individual, but in ways diametrically opposed. Rousseau would say, "Isolate the individual in order that he may attain the freedom and perfection of his nature." To this Froebel would reply, "Isolate the individual and he ceases to be an individual. It is only through existence and participation in the wider life of nature and of humanity that the individual can become human and spiritual and free." This is Froebel's doctrine of the *Gliedganzes,* the doctrine, namely, that while the individual is a unity he is at the same time a member of a larger unity; the individual is not a self-complete whole. He must be viewed in his relation to nature, to humanity, to God. He is not independent, nor self-subsistent. Perhaps most of us would agree that this is true; we would agree also that the individual life is full and deep in proportion to the breadth of its relations

to nature and human life; but Froebel gives to the doctrine a deeper metaphysical basis than is at first apparent. It will be well to recall briefly in this connection his position in order that, if possible, the significance of this doctrine in its ethical and educational aspects may become more apparent. For him, as we have seen, God is the source and spirit of all things. Whatever is real is real only in and through him, for he is the immanent life of all that is — nature, humanity, the world. All things are manifestations of the divine life, the source of all knowledge and of all existence. On the other hand, while all things, all existences, manifest God, they do so each in a determinate and definite way, and each in its own degree. Thus, while the individual cannot realize himself apart from the principle of all existence, yet this principle does not "destroy its offspring," but gives to each individual that mode of existence which separates him from all other existences in the world. Each individual human being, accordingly, has his own peculiar and definite nature, not in spite of, but rather in virtue of his dependence upon the larger life to which he owes his existence and his capacity for development. While it is the very nature of the finite individual that his actuality, his development, consists in the process whereby, through the exercise of his own activity, he comes to be what in idea he is, nevertheless Froebel contends that he can reveal his distinctive quality, be himself, only because his nature as a spiritual being is grounded in God, the principle of all existence and development. Apart from such a principle, as manifested in nature and humanity, the individual would have the power of knowing neither the world nor humanity, nor, accordingly, himself. The mind of the individual is thus for Froebel determined, but not constrained, to know and adjust its life to the life of nature and of other human beings. The fundamental problem in education is, therefore, the "presentation" of the individual life in its own perfection and reality, not in isolation from, as Rousseau would have it, but through participation in the wider, spiritual life which is the ultimate guarantee of its perfection as well as its reality. That individual is, accordingly, the most truly individual, human, and free who through knowledge and action has made himself a bearer of the divine purpose, a sharer in the divine life and purpose manifest in nature and in the spiritual life of humanity.

By the presentation or realization of the individual life, a conception which Froebel identifies with the educational ideal, he means the development of the spiritual nature of the individual, of his conscious, self-determining activity in conformity with the laws of nature and the relations of human life. The individual is essentially creative activity; he is what he can do. Where there is no doing there is no being. Although man depends upon nature, upon humanity, upon God as much as the stone by the wayside or the beast of the field, yet his dependence is of a different character. The divine nature in man attains to higher expression and fuller consciousness. In him the divine life expresses itself not simply as existence nor nutrition nor sensation: but as desire, as the knowledge of nature; in sympathy for things human, in the creation of the beautiful, in striving towards the good. In virtue of reason man can organize his impressions of the objects and beings about him into systems,— nature and humanity,— and bring both under the idea of a more inclusive unity. Self-realization means therefore man's conciousness of the latent wealth of his spiritual nature, the knowledge of nature, of man, and of God, and a life lived in accordance with their laws. The process of the spiritual life is, therefore, the process whereby the law of the world in which he lives becomes the law of the life of man. This seems to be the significance of Froebel's well-worn but wonderful words near the opening of the *Education of Man*: "It is the special destiny and life-work of man, as an intelligent and rational being, to become fully, vividly, and clearly conscious of his essence, of the divine effluence in him, and therefore, of God; to become fully, vividly, and clearly conscious of his destiny and life-work; and to accomplish this, to render it (his essence) active, to reveal it in his own life with self-determination and freedom." This statement of the educational aim in terms of the life aim is undoubtedly the logical implication of Froebel's philosophical position. Accepting his philosophical position, even in a general way, are we justified in considering his statement of the educational aim as nothing more than a mere idea or empty phrase?

Instead of speaking of the self as an organic unity, it would perhaps more adequately represent Froebel's thought to say that the self, or the individual, at any stage of his existence, is in a process of organization or unification. From the subjective

point of view the process may be viewed as the unfolding of the consciousness of self; from the objective side it is the increasing unity of the self, through knowledge and will, with its three-fold environment. The unity, to begin with, is for the most part potential merely. From the first, however, the individual and nature are something of a mutual fit. The child's first utterance, his first "presentation," is that of force. It is blind, — but it is the manifestation of the individual in and of himself, not of another; it is the first unity of inner and outer, force and sensation, the elements out of which will later emerge the higher knowing and creative activity. The first manifestation is not intelligent, but is determined, not through outer force, but by the inner constraint of the individual's own nature. Meeting with opposition or antagonism, the lowly beginnings of self-consciousness become manifest. To produce this is the function of opposition or antagonism for Froebel as for Fichte. The first manifestation is mere blind will or feeling, but through inner necessity the soul as cognition and will moves forward to embrace the world of nature, and the complex relationships of society in distinct and articulate comprehension. The spiritual life, therefore, does not abruptly emerge a full-grown endowment of the individual: like all other things it has a genesis and follows a law of development. Each stage has a development of its own and, if the development is to be complete, the mind must receive at each stage that which the particular stage demands. From the educator's point of view, therefore, education by development demands the closest conformity of his method to the various stages in the genesis of the mind of the individual. The starting point in instruction should be the inner need or activity of the individual. "Indeed," writes Froebel, "to a certain extent such a want is indispensable if the boy is to be taught with profit and success."[1] On the other hand, the instructor should be careful "to render the inner life of the child as rich as possible, not so much in diversity as in inner significance and activity."[2] The educational aim, accordingly, for Froebel, is not something beyond or external to the educational process. It is found within the process itself. It is a process, moreover, through which the self finds expression and realization, and it is, moreover, continuous. The very center of

[1] *Education of Man*, p. 223.

[2] *Education of Man*, p. 222.

his thought is development through self-activity, in knowledge and creative work. Just as our highest conception of God is connected with the principle of creative activity, our truest notion of the human individual is as a manifestation of the same principle. It is through labor, through productive work, through participation in the common things of our common life, which is none other than the divine life, that the spiritual nature of man is to be developed. It was the fostering of the creative spirit that was ever of most interest to Froebel.

The significance of this unification and development, in which both the life and the educational process may be said to consist, is at first largely unconscious, so far as the individual is concerned. Yet since he exists in a social medium, with its emotional atmosphere, its modes of activity, its methods of speech, its social requirements, his activities are not left wholly uncontrolled. The theory of development enunciated by Rousseau logically demanded the isolation of the child. Froebel's thought is the direct antithesis of this. While he would seek to develop the child's own activities, yet with Fichte he would maintain that the activities developed should be educative. He did not believe in the mere unregulated expression of natural 'spontaneities.' Man's true nature is his human nature, the life of man in human relationships, and the conscious exertion by which this is realized, demands the fostering of the activities which make such life possible and the suppression of those which militate against it. From the first the individual exists in a social environment; he is in a very real sense possessed by the larger life of the society which surrounds him. If the individual is to live a human life at all, his activity must be continuously subject to social direction and control. One of the great problems in educational practice is, therefore, the one suggested by Froebel, How may the various agencies and influences, which serve to modify and control the life of the individual, be made to coöperate more harmoniously and more completely in securing the larger and freer development of his nature. As there should be conscious control in the direction of the activities of the individual in order that he may be saved from the needless experiment, so should there be conscious selection of those materials which are best fitted to supply the needs and furnish a medium for the fullest self-expression of the individual at each

stage in his development. For Froebel, therefore, the curriculum or course of study should represent a selected environment.

"Method," says De Greef, "is the loftiest process of individual intelligence." It was an educational method, in the larger sense of this term, that Froebel throughout his educational career attempted to formulate. What does the educational process mean; how is it possible from the very nature of the elements which enter into the process; how may that which is performed by instinct be shown to be reasonable; how may reason take the place of instinct? How may the law of development, in a word, through inner necessity, become the conscious ideal of human life and aspiration?

Any account of Froebel's thought is incomplete which does not give prominence to his contention that religion is the culmination of education. In the study of his life and writings one everywhere encounters an almost passionate religious tendency, not a sentiment, but a habit; a continuous direction of the mind to God which formed in a very real sense the invisible atmosphere of his thought and work. The religious element seems to have been the latent principle of his life in its entirety, intellectual and moral. In perhaps no other theory of education do we find this phase so worked into its very structure. And this is so, for the reason, it would appear, that no other educator was ever more firmly convinced than Froebel that the religious aspect is no mere transitory element in human nature, but part and parcel of the very organism of intelligence itself. For Froebel the rationality of religion rested on the fact that it offered to his mind an ultimate synthesis of the elements which enter into our intellectual and moral experience. It is needless to repeat, therefore, that by religion he did not mean any supramundane or transcendental matter. There are those who locate the spiritual in the crevices or gaps of a world elsewhere mechanical. Froebel was accustomed to look upon the world we know and with which we have to do as spiritual and to find that the more he regarded it in its unity and development, the more spiritual it became. For him, moreover, the very life of spirit is a life of manifestation. God reveals Himself in the orderly processes as well as in the beauties of nature, in the onward movement of humanity, in Christ, in the depths of his own soul. In these God is revealed to man, and through these man may come to know and hold communion with

Him. The religious life as knowledge is therefore none other than the truth of conscious experience, its presupposition and its goal, and religion is the common human life of man on its highest level. Believing as he did, Froebel was convinced that any theory of education, to be practicable in the long run, must be consistent with the largest view of human nature, and, accordingly, with the most comprehensive philosophy. "What I believed earlier," he says (writing in 1828), "indeed was convinced of, and was founded only partially on my own intuitions, I see now in all creation, in the being of things, in nature and the ordering of the world, and the progressive culture of humanity; God in creation, in the order of nature and the world, in the progressive culture of humanity, is the source of human education; this is the fundamental thought of my spiritual inward and outward educational life."

For Froebel the religious element is cheaply honored, when it is made exceptional. He believed in its validity, and in a sense, made it the vital soul of his educational theory and practice. He was in earnest in his belief. In the attempts made towards religious instruction at the present time there is grave danger of confounding the formula with the reality — and the attempt seems half-hearted when compared with the practice of Froebel.

Some may regard this emphasis by Froebel of the religious element in education as a mere piece of fanciful speculation, without any direct or even possible applicability to life. He is either in the way along which truth lies or he is not. The entire history of human life makes one hesitate in answering him with a dogmatic negative. "Can we treat the unseen world," asks Shadworth Hodgson, "as if it were non-existent? Is it possible to do so in the long run? And if not, is it wise to endeavour to do so for a brief and uncertain time? Surely it is not. The natural relations of man are with infinity. Systems of philosophy, alike speculative and ethical, must recognize these relations. If they do not, they are houses built on sand, which the facts of human nature will lay in ruins;

'Experience, like a sea, soaks all-effacing in.' "[1]

Froebel's system has that unmistakable mark of greatness about it that makes it worth our faithful effort to understand it

[1] *Philosophy of Reflection*, vol. 1, p. 23.

and turn its conclusions to our advantage. The very fact that it has claimed so many adherents, and has worked so many vital changes in educational practice arrests and compels attention to the thought upon which it is based. To his disciples his system has become a unique power not merely over the heart but over the thought and the life as well. They are indebted to him for a new interest imparted to their work and for the indestructible confidence that education is no mere empirical matter, but has its warrant deep in the very nature of the world. His philosophy of education, taken as a whole, seems, perhaps, the most satisfactory we have yet had. One cannot but believe, however, that the candid reader will at times find conclusions in his writings sustained by reasonings that are inadequately developed and important questions by no means satisfactorily answered. We must not, therefore, permit ourselves through mere kindliness of heart or intellectual inertia to accept or emphasize as true or final all that Froebel ever said or did. On the other hand we must not forget that it is insight, rather than exactitude, that is the life of a philosophy; herein lies the secret of Froebel's lasting influence and power.

NOTES ON PSYCHOLOGY FOR KINDERGARTNERS

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It is the aim of this paper to call the attention of those interested in the education of very young children to some of those psychological facts and laws which have a practical meaning for their work. Those will be selected especially which are the results of recent work by psychologists, and consequently are not readily accessible in ordinary text-books. If this incomplete selection, limited by space and the author's other duties, is found useful, some one may be encouraged to do more justice to the psychological basis of infant education.

This body of knowledge will be presented in a bare and straightforward series of propositions, interspersed with such suggestions regarding the practical conduct of kindergartens or training schools for kindergartners as the facts seem to warrant.

The following topics will be discussed:

The Relation of Mental to Bodily Life.
Mental Health.
The Relation of Mental Life to Muscular Contraction.
Mental Growth.
Native Tendencies.
Habit (including under this term the general dynamics of mental life).
Inhibition.
The Influence of Special Forms of Training upon General Abilities.
Suggestion.
Modern Means of Measuring Mental Traits.

In a second division of the paper attention will be called to some of the ways in which the kindergarten is progressively adapting its procedures to the insights of science into the laws of

the human mind and its growth, to some aids to kindergartners who are studying psychology, and to the proper position of psychology in the curricula of kindergarten training schools.

I am convinced that, however incommensurable with ordinary fact the traditional terminology of the kindergarten may appear to outsiders, it is not so in the minds of its students amongst kindergarten leaders; and that kindergartners themselves are in reality eager to learn from science and to proceed in accordance with facts. I have no expectation that psychology or any other science offering possible suggestions to them will meet with anything but a ready welcome and an honest scrutiny. I find no intelligent person within kindergarten circles who does not assent heartily to some such general basis of mutual understanding as the following:

> The kindergarten aims to do its share in producing those results which the general purpose of education seeks in children of three to six years. These are, of course: health of body and mind; strength and bodily control; experiences of the qualities and functions of many common objects and living things; interests in the world of nature and the concrete and objective life of man, especially a useful curiosity and intelligent sympathy; desirable habits of feeling, thought and action; and such ideals or intentions as are intelligible to very young children and are useful in guiding them to obedience, kindness, modesty and courage.
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> The kindergarten's share will in any case depend upon its limitations of time, equipment and teaching staff, and upon the nature of the other forces in the environment of the children which it has to counteract or assist.
>
> In seeking the best ways and means to realize its aims the kindergarten relies upon the judgment of experts in the special sciences and arts. For the facts of physiology, hygiene and psychology, of nature, language, human affairs and history, the kindergarten must turn to the appropriate sciences. For knowledge of physical training, methods of teaching music, language, literature, form, color, number and the like, the kindergarten turns to the experts in these arts. Amongst these will be included, of course, the expert in the education of very young children, who will presumably be a kindergartner.

With full confidence, then, that my readers possess the intellectual morality to desire truth from any source, and with assurance from my side that the only conceivable reason for my writing this paper is the possibility that it may be of help to them, I proceed to the direct discussion of the topics outlined above.

The Relation of Mental to Bodily Life

The intellectual and moral life is intimately connected with the condition of the bodily organs, especially of the nervous system. Disturbances of the digestive tract and astigmatism, for instance, are common causes of the errors of children in thought and conduct.

Care of the body is perhaps most rewarded in the case of young children. Defects are more easily remedied; bad habits are not so firmly established; the incapacity of the children themselves to understand personal hygiene or to connect the bodily disturbance with its effect, properly demands our assistance.

Whatever agency controls the education of children from three to six years of age must provide for an adequate physical examination for the correction of defects, especially of eye, ear and throat; for the establishment of a proper dietary; for healthy habits of sleep and exercise; and for the minor matters of hygiene, such as the care of teeth and regularity in moving the bowels. Just how far the kindergarten as now organized should share in these responsibilities is a question the answer to which must vary with the special circumstances and resources of each particular school. At all events, no kindergartner can rightly neglect these aims altogether in planning her 'curriculum,' or wilfully violate the claims of bodily welfare in her class work.

The following matters especially seem to deserve the renewed consideration of leaders amongst kindergartners:

The provision of out-door play, especially in large cities.

The requirement of hygienic essentials in the heating, lighting, and ventilation of kindergarten rooms; and in the arrangement of rooms for the children's clothes and of toilet-rooms.

The substitution for seating in the circle and around tables, of some form of seating such that the light will come to all children from the side.

The need of a thorough-going critique of the common games

and occupations in the light of their influence upon the sense organs and nervous system.

The regulation of lunches, rests and, perhaps, naps.

The establishment of a physical examination as a custom in kindergartens.

The assignment in training schools of a fair proportion of the student's time for the study of the anatomy, physiology and hygiene of childhood.

The making, in some cases, the mental and moral progress of the children a minor matter, until their bodies have been gotten into shape for intellectual and moral endeavor. One can well conceive of a set of children whose teacher might choose as the first gift, a tooth-brush, and as the first occupation, sleep.

Mental Health

The intellectual and moral life depends in part upon the general tone of feeling, upon such conditions of mind as we call excitement, nervousness, hysteria, cheerfulness, apathy and the like. In other words the efficiency of the mind is related to its health. This is especially true in childhood. After our habits of thought and conduct have been established we may vary widely from the standard of healthy-mindedness without varying more than a little toward inferiority in reason or morals. But if in childhood the mind departs from a steady balance of health, eccentricities of intellect and behavior seem to follow to a much greater extent.

As a means to general welfare and also for its own sake, a child's mental health needs care. In America to-day the chief dangers to young children in this respect are intellectual over-stimulation, over-excitement, worry and the complexity of life.

By over-stimulation of the intellect is meant the relative lack of purely physical play, such as running, jumping, climbing, digging, paddling, and the relative abundance of indoor life with toys, stories, social amusements, school work or play, and so on. Over-excitement needs no definition; we are all familiar with the favored youngster who has a hundred toys; who eats all sorts of dishes; who goes to kindergarten, parties, a children's matinée, the circus, and Sunday School all in the same week; who sees more things in a

month than his grandfather did in ten years. We all know the modern school-room where eyes are all ablaze, hands are waved desperately and children pop out of their seats like corks. Worry and the complexity of life are also factors that need no description.

The danger to mental health from these too common features of American life is greatest in the earliest years of childhood, and has apparently been increased by the changes that have taken place in elementary schools in the last score of years. It would be better for a four-year-old to be left to himself in a back yard for the three hours daily than to attend a type of class which will deprive him of proper physical play and rest, keep him constantly on the *qui vive* emotionally, and add to his burdens from an already over-rich environment. The kindergarten must not forget the value of the gross physical activities, of monotony and calm, of an objective life, and of very simple pleasures and duties.

Among the practical issues suggested by the need of care for mental health are the following:

The introduction of periods of physical training, pure and simple, preferably in the form of free play out of doors.

The abandonment of 'interest' as an idol when it means excitement, mental bustle and explosiveness.

The desirability of encouraging children less to think about their successes and failures.

The assignment in training schools of a fair proportion of the student's time to the study of the psychology of childhood.

The Relation of Mental Life to Muscular Contraction

The life of the mind is doubly connected with the contraction of the muscles. In the first place the function in nature of our thoughts and feelings is to stimulate and guide muscular contractions. In the second place these contractions, when made, modify our thoughts and feelings and are a chief determinant of the mind's make-up. Consequently any impression upon the mind is wasted unless sooner or later it alters conduct, which is, in the terms of natural science, muscular contractions. Any system of education which neglects the reflex effects of muscular action upon the mind is essentially one-sided and inadequate.

The kindergarten movement has historically done a most useful work in bringing educational practice into relation with these

principles. Learning in order to do and learning by doing are war cries that it has long adopted and shows now no signs of forgetting. It is, however, important that certain corollaries of the relation of thought to movement should be emphasized. In the first place the muscular contractions involved in speech, facial expression and eye movements, are from the point of view of mental progress the most important. The head is intellectual king even in the muscular system. Motor training which neglects speech leaves out a keystone. Constructive work which thinks of the hand oftener than of the eye is ill balanced. We can judge intellect and morals far better from observation of facial expression than from the entire gamut of hand-and-arm movements. It would be to leave the frying-pan for the fire if the narrowness of reading, writing, sewing and instruction in piety and behavior were to be overcome only by the greater narrowness of finger-and-arm gymnastics. In the second place, muscular contraction, the expression of mental life, is not synonymous with movement. A great part of muscular activity serves to *prevent* movement. These inhibitory activities are indeed the ones most concerned in mental life. The mind may almost be said to be what the body does *not* do. Its lessons are lessons of control, guidance, restraint. In the case of eye-movements, for instance, excess of movement and constant susceptibility to any stimulus are signs, not of beneficent self-activity, but of stupidity and nervous disease. It literally requires more activity for a kindergarten child to listen than to sing, to sit still than to run. Inhibitory activities, though fatiguing and likely to be over-emphasized by those of a puritanical or schoolmaster temperament, are highly educative. Their neglect means the 'spoiled child' intellectually and morally.

A third corollary to the general doctrine of the relation of mental to muscular activity is a rebuke to mysticism and vagueness in the education of the young. The fruits of mental worth are almost always plainly discernible in expressed acts. We should not boast of a development, intellectual, moral or spiritual, unless we can produce evidence of it in the actual deeds, words and looks of the children. Nor should we, in default of a production of actual changes in concrete capacities and habits, take refuge in the hope that there has been an increase of 'power' or a change in 'personality.'

The practical consequence of these considerations might be

(1) the widening of the motor side of kindergarten training to include to a greater extent all valuable forms of expression, notably speech; (2) the allowance to kindergartners of a greater freedom to check and abolish certain natural but highly undesirable gestures, forms of movements and the like and (3) the introduction into books on kindergarten principles of a more matter-of-fact, concrete and definite description of the changes expected to be wrought in the make-up of the children.

Mental Growth

That the mind to some extent grows by an inner impulse, independently of the outside influences of education, is now an axiom of science. The faith of the early prophets of the kindergarten has been confirmed in large measure, though also tempered and restricted, by the facts of actual investigation. This inner growth is a composite of the changes due to maturity, first in instincts and second in the capacities and powers of the sense organs, motor apparatus and ideational mechanism. The psychology of these will be discussed later. Here it may be said that the exact extent of the shares of inner growth and outer training in the making of a human mind are not known; that in its details no problem of psychology is more puzzling than that of measuring the inner maturing of mental life; that the arguments, conclusions and educational dogmas which cluster about the changes of mental traits with growth or age are for the most part imperfect and unreliable. To base one's educational practice upon some preconceived theory of growth without constant guidance by the actual results of that practice is surely criminal. Since for practical purposes the important question concerns precisely the extent and manner of influence of inner growth, which are precisely the facts where knowledge is lacking, our best treatment of this topic will be silence.

Native Tendencies

I use the words instincts and native capacities to refer to the entire sum of mental tendencies which are unlearned, are in human beings apart from the influence of experience, are the free gift of nature to man. They include tendencies to think, to feel and to act

in certain ways in certain situations. The important facts for our present purpose are: that they may be delayed in appearance; may be transitory; are vague and rough-hewn, depending upon experience to decide the particular habits into which they shall grow; are modifiable with all degrees of ease and difficulty, can, that is, more or less easily be strengthened, weakened, inhibited altogether or transformed into new habits only partially like the original tendency; their function in nature is to form habits; they are from the point of view of human ideals sometimes good, sometimes bad, and sometimes indifferent. Since accounts of the psychology of instinct which are comprehensible and readable by students of only moderate acquaintance with general psychology are available,[1] I shall deal very summarily with these general principles, and presuppose knowledge of the literature mentioned below, in the discussion of the meaning of these native tendencies for kindergarten education, to which we may now turn our attention.

Native tendencies represent the capital which education has to invest; on them, the natural human make-up, we build the structure of habits, powers, knowledge and interest which are an educated man. To invest wisely and economically we need to know the nature of the capital; to build surely we need to allow for the foundation. The problem of the kindergarten here is to use for human ideals the native tendencies of children from three to six. Some tendencies are to be fostered, for example, the native capacity to follow hand movements with the eyes, or the native intellectual curiosity; some are to be weakened, for instance, the instinct of display and adornment; some are to be inhibited altogether, for instance, the instinctive teasing of living things; some are to be transformed into a new life, for instance, the fetch-and-carry or retrieving instinct should be turned into general helpfulness. Transitory instincts when useful are to be eagerly exercised at the time of their appearance, and when harmful are to be carefully deprived of exercise. Not more may be demanded of children than their capacities or rather incapacities warrant. In control of movement, in sustained attention, in time sense, in power of generalization and abstraction and the like, we may expect at the start of life only what nature has provided.

[1] Wm. James, *Principles of Psychology;* C. Lloyd Morgan, *Habit and Instinct;* Edward L. Thorndike, *Notes on Child Study*, Section 5.

Nothing in these recommendations should be taken to support the absurd idea that what a child instinctively tends to think or feel or do at any age is what he should do at that age; that the degree of capacity which nature alone would give him at any age is all that we should strive to have him attain. Were native tendencies sufficient, education would be totally unnecessary and vain. On the contrary, I have tried to state absolutely that both instincts and capacities are there primarily to be changed, sometimes to be annihilated. We learn about them not to follow but to lead them.

On the basis of the general psychology of native tendencies to which the preceding section has been only a sort of sign-post, the following points seem to be worth renewed consideration by kindergarten leaders:—

Does not the occasional narrow use of the gifts, plays and occupations miss the motive power which would come from a wider appeal to the whole range of childish interests? Does the geometry of the gifts represent more than a thousandth part of the education that a child should have in these years? Is not pattern-making with blocks or slats or paper rather a transfer of the fancy-work interests of adults than an adequate representation of the infinite variety of healthy and instructive child's-play? Ought not the kindergarten system to first survey the whole range of childish zest and then choose the plays that seem most fitted to serve the mind's values?

Plays with water and dirt, plays of pursuit and strength, plays of search and collection, plays with animals and dolls, plays of ownership and arrangement — the list might be far prolonged and still be worthy of examination by any one planning the systematic education of young children. The capacities for observation and experiment and record of all the facts of nature and civilization; for neatness, order, regularity, invention and device with all sorts of material — ought these not to be considered to see which are best fit for fostering and direction in early years?

In general will not the kindergarten gain from a broad contact of its theories with the facts known concerning native tendencies? The enterprise of many kindergartners who have not put their trust wholly in the traditional Froebelian material nor in manufacturers' catalogues, but have sought in the children's own life the means of its improvement, has already answered the question.

Conversely, should not every procedure of the kindergarten be examined with a view to the detection of any unwarrantable appeal to the lower instincts and useless capacities? May not the object-lessons appeal at times only to the gross appetite for excitement; may not the imaginative play minister at times to the capacity for silly sentiment and weak fancy?

Amongst moral tendencies, does the kindergarten give enough stimulus to independence, pugnacity of the solid not the quarrelsome type, courage, and to what we may call in a general way the manly virtues of childhood?

Habit

The psychology of habit is fairly recognized in educational practice in the case of those customary activities which we call behavior, but its fundamental importance throughout the life of ideas and ideals is neglected. The truth is that a human life is a bundle of habits; that what we mean by knowledge is habits of sequence amongst ideas; that what we mean by capacity is the possibility of forming a certain set of habits; that what we mean by a power is a set of habits not actually functioning; that what we mean by interest is a habit not of execution but of attitude; that what we mean by an ideal is a habit not of execution but of intellectual or moral regard. The function of the mind is to form connections between impressions and our responses to them, and the phrase, 'habits of thought and action,' as used in psychological literature is simply a name for these connections.

The practical import of this is simple enough. It is, in short, that unless we measure our educational work in terms of actual habits formed, we are likely to deceive ourselves with vain hopes of mysterious transformations in the 'soul' or 'personality' or 'development' or 'growth' or 'spiritual nature.' A transformation in the soul or personality, if real, is a change in the ways it acts. A change in development or growth in the mind is a change in its responses to things and people and its own ideas. A change in spiritual nature, if real, is a change in the habits of thought and action toward the broadest issues of life and the unseen things of God. There is in fact no greater step forward to be made by the teacher or educational leader than to adopt the custom of working directly for concrete habits and measuring his success by their attainment. It must be remembered, of course, that the most obvious

habits are not necessarily the most important; that a new gleam in the eye, a new tone of the voice, a new vigor in intellectual work, may in the long run mean more for the cultivation of habits as a whole than some far more striking accomplishment.

The leaders of the kindergarten system who are eager for its introduction as a recognized division of public education everywhere will silence the majority of criticisms and answer the decisive question in the minds of most school officers, if they will present a list of worthy habits, the establishment of which by properly conducted kindergartens they can demonstrate. There is, it must be confessed, in some kindergarten literature an offensive air of speculative exaltation and of unwillingness to talk the matter-of-fact language of practical school men and common sense. This can only obscure the truth and create prejudices, unjust it may be in fact, but all the more harmful.

In the formation of habits renewed attention can well be given anywhere in educational practice to the following laws:

(1) Every habit is the result of a selection, sometimes of one from only one, but commonly of one from a number of possible responses to some situation of life.

(2) In any situation those responses which result in satisfaction or indifference will, as the situation recurs, be increasingly more likely to be present, while those responses which result in discomfort will be increasingly less likely to be present.

(3) The chief sources of discomfort to human beings are (*a*) pain and (*b*) the thwarting of instinctive or habitual impulses. Of these the latter is certainly the more important, though in theories of conduct it is less emphasized.

(4) The closer the response is connected in time with the satisfaction or discomfort, the more readily is the habit formed.

(5) When a habit to be formed is identical with or a fraction of some native tendency, the best time for its formation is that of the ripening of the tendency.

(6) When a habit to be formed is opposed to some native tendency the best time for its formation is, other things being equal, the earliest possible; the general rule being,—

(7) Given the presence of the anatomical and functional basis necessary, a habit is formed most easily in the earliest years.

(8) In forming habits of inhibition, we may teach a child

either to meet the situation in some other way, or to actually confront the impulse and conquer it.

(9) The younger and consequently the less discriminating the child, the more likely any exception to or relaxation of a habit will be to cause it to lapse.

(10) The younger a child is, the more likely are the incentives and deterrents used to establish the habit to fade from consciousness. They may therefore be irrational with less injury in the earliest years.

(11) In human life by far the most important habits are those of responses to the words or other signs standing for abstract qualities or general classes, such as: 'You ought'; 'It is right'; 'The Bible says so'; 'It is true'; 'The happiness of the world demands it'; and so on.

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These laws imply the folly of expecting the mind to do something for nothing, imply the need of incentives and deterrents in addition to the native satisfaction in physical and mental activity, and the futility of mere repetition as compared with the selection of gratifying responses. The great contribution of the so-called doctrine of interest to modern education has been its recognition, half unconscious indeed, of the fact that any mental activity must be so arranged as to pay the active agent something which he craves, if it is to produce any permanent change in him. Accident, example and suggestion may originate an activity, but only interest, intrinsic or derived, can support it. The mind is a cautious investor that withdraws its capital when it ceases to pay dividends of personal satisfaction. All our means and methods must, in the last analysis, be arrangements for making the good thoughts and acts of profit, and the bad thoughts and acts of disadvantage, to the personal cravings of those educated. It is true that what is done at first with distaste may by repetition be-

come a habit, but only if sooner or later it brings a balance of profit.

(3) *The chief sources of discomfort to human beings are* (a) *pain and* (b) *the thwarting of instinctive or habitual impulses. Of these the latter is certainly the more important, though in theories of conduct it is less emphasized.*

The doctrine of interest again built more wisely than it knew when it discredited the pains of artificial punishments and the pleasures of artificial rewards in favor of the zest of immediate progress and self-interest. The older school practices relied chiefly on pain and the sensory pleasures. They took no especial care to prevent the thwarting of natural and acquired impulses, or to use the energy of a natural man for the advancement of the ideals of the educated man. Now the ordinary four-year-old is much more annoyed by having something he has eagerly seized pulled away from him than by a severe bump on the head. He would much rather cut his finger than be held when struggling to escape. It is far more economical to let him play out his imaginative impulse untrammeled than to pet him afterwards; to let his eager curiosity win its natural fruition than to send him home with a prize. The great cry of children, and indeed of us all, is 'Let me alone'—alone to enjoy unentangled the flow of life, to follow unchecked the lead of impulse. Where teachers can do this without injury to the final ends of their work they will be backed by the unearned capital of natural law.

The beneficence of modern sentiment in its labors to decrease pain is equalled by the cruelty of its blindness to the real cravings of those whose happiness it seeks to serve. One sees this everywhere—from the mother who protects her baby from all physical injury only to torment it by restrictions of its innocent impulses, to the philanthropists who in protecting the Indians from the minor pains of a precarious existence have destroyed all their joys. Let us beware of it in the kindergarten.

(4) *The closer the response is connected in time with the satisfaction or discomfort, the more readily is the habit formed.*

The immature and untrained minds of five-year-olds do not hold in memory the events of a day or an hour well enough to connect rewards and punishments accurately with acts that are

past and gone. The younger a child is, the more likely he will be to connect as cause and effect and to retain as habits things and acts that go together in immediate sequence. He steals his playmate's toy; you later find it out by seeing the toy in his possession; you call him to you and administer the rebuke or other punishment. The chances are, with a kindergarten child, more than even that he will form the habit, not of refraining from theft, but of refraining from showing what he steals or even of not coming to you when you call him. The teacher who connects rewards and punishments with the results of certain impulses, will attain only insecure progress in habit formation. The teacher who connects them with delayed detection of the good and bad acts will probably only work the mischief of forming habits of display and deceit. The utmost ingenuity is required to prevent young children from the irrational associations of ideas and undesirable associations of acts with circumstances which follow whenever we fail to connect the incentive or deterrent closely with the impulse.

(5) *When a habit to be formed is identical with or a fraction of some native tendency, the best time for its formation is that of the ripening of the tendency.*

The usefulness of this law would be much enhanced if we knew the dates of ripening of the native tendencies. After the first two years and with the exception of the instincts connected with puberty, the dates or serial order of the ripening of instincts and capacities are practically unknown, though very many statements of opinion may be found in educational literature.

The theory of the matter may be made clear by an illustration from infant life. The habit of using speech to express ideas and attain desires can best be established in the second year of life (the exact time varying with the individual's rapidity in mental development). To talk to children and entice them into making sounds is futile during the first six months. The instinct is not yet ripe. To wait till four or five years of age would be uneconomical for the converse reason, though instances of this mistake are of course rare. If the capacity for understanding geometrical relations did not ripen till the ninth year, it would be unwise to attempt to teach kindergarten children to comprehend them.

Very much has been made of this law in general discussions, but the information that a kindergartner would naturally desire, namely a list of the instincts and capacities ripening during the kindergarten age and of their dates, is not forthcoming.

Following the best opinion, one may say that from this point of view the kindergarten age is best fitted for the cultivation of habits of examining and manipulating concrete objects, of individual imaginative play, of behavior toward playmates and toward adults in the family and of conventional observance of the simpler social and religious forms. But no such statement is sure.

The sixth and seventh laws which simply paraphrase the common proverb, 'It is hard to teach an old dog new tricks,' need no comment; nor does the simple suggestion of number eight.

(9) *The younger and consequently the less discriminating the child, the more likely any exception to or relaxation of a habit will be to cause it to lapse.*

It is the vice of the careless teacher to only half enforce habits of thought and conduct. But habit formation in young children is the clearest of all cases of, 'What's worth doing at all, is worth doing well.' A habit occasionally relaxed means mere confusion to the untrained mind of the immature child. It is the error of the conscientious and rational teacher unduly to complicate thought and conduct by allowing for exceptions, gradations, circumstances and so on. It often seems inhuman and untruthful not to do so. But a rule once broken is likely to mean mere uncertainty to a kindergarten child. He reacts to the failure of the rule, but not to the reason therefor. The greatest efficiency comes from a system of simple habits which can be enforced, rigidly adhered to until the child can make a differentiation of the circumstances to fit the difference in treatment.

(10) *The younger a child is, the more likely are the incentives and deterrents used to establish the habit to fade from consciousness. They may therefore be irrational with less injury in the earliest years.*

It is a folly of both the sentimentalist and the ultra-rational

thinker to insist that children should not only think and act rightly but also from the right motives; that to tell the truth to avoid a beating is no better than to tell a lie. For a mature, responsible person this may be true, so far as goodness and badness mean respectively things worthy of merit and things worthy of blame; and so far as telling the truth to avoid a beating forms precisely that habit. But with most school children, certainly with kindergarten children, telling the truth to avoid a beating will form the habit of telling the truth in general, the memory of the original motive fading away into obscurity while the actual habit of performance remains. For a college student to study to win a large salary is perhaps no better than idleness; for a gentleman to be honest because honesty is the best policy is perhaps no better than to be dishonest. But for the kindergarten child the important thing is that it should *be* obedient, generous, cheerful, courageous and kind, the reason why being a matter that will with proper treatment die out from the habit and leave it as a general tendency. We all have to begin with the so-called lower motives and can hardly be expected to have sloughed them all off by the fourth year of life. It is the good fortune of moral training that the lapse of time so often preserves a good habit, while allowing the feeling of its source to die out from consciousness.

(11) *In a human life by far the most important habits are those of response to the words or other signs standing for abstract qualities or general classes, such as: 'You ought'; 'It is right'; 'The Bible says so'; 'It is true'; 'The happiness of the world demands it'; and so on.*

It is the peculiar privilege of human thought and conduct to react not only to the gross concrete situations presented by life, but also to groups of facts brought together in thought in spite of their separation in reality, and to elements of facts analyzed out in thought in spite of their non-existence, save in compounds, in reality. Our habits of thought and action in response to these group facts and abstract facts, or to whatever mental states stand for them, include many of what we call our habitual attitudes, general habits, points of view, characteristics of personality and so on. Thus, for instance, the habit of responding to emotional promptings of revolt by non-attention

when fact and logic have given to a situation the label, 'It is really desirable,' *is* the reality which we call the rational will.

Habits of single response to a group of objects by means of response to the sign standing for any one of them allow a tremendous economy of time. Habits of response to qualities of objects or elements common to many facts allow a wonderful simplification of the world's problems. Though less obvious than in the case of the intellect the fact is perhaps more important in the case of morals. For the child who has learned to respond by submission to the 'You ought' or 'It is wrong' of parents or teachers, a multitude of special habits, cross-purposes and chaotic views have been transformed into a simple law of conduct.

Inhibition.

Mention has already been made of the fact that the action of the mind is as noteworthy in restraining as in arousing muscular contractions, and of the fact that education has not only to afford an adequate stimulus to those native tendencies which are good, but also to repress those which are unworthy. Very many of the habits desirable in kindergarten children are obviously habits of restriction or inhibition. On the whole, inhibition, which is a leading topic in the study of mental development by psychologists, may well be equally prominent in the theory of kindergarten education. It is no mere jingle of words to say that we are what we are by virtue of what we are not. We progress as truly by eliminating errors as by adding successes. If we take from Froebel the analogy of the growth of the mind to that of a plant, we may say that rigid pruning is the absolute prerequisite of sturdy growth and well developed fruit. Indeed it may be that in the proper haste to escape from the illogical and cheerless doctrine that whatever is hard and disagreeable is especially educative, modern parents and teachers have approached dangerously near to a weak submission to whatever is in childhood as right. We do not wish sybaritism in four-year-olds any more than in adults; and we should not entice and fool children out of bad habits when straightforward inhibition is the honest and economical course.

The Influence of Special Forms of Training upon General Abilities

The knowledge of the nervous system and of general psychology which has accumulated in the last fifty years, together with some very recent studies of the relationships of mental functions and of the influence of practice with one function upon the efficiency of others, has made it necessary to look upon the mind no longer as a few general powers, such as attention, memory or reasoning, which act irrespective of the particular data with which they are concerned and which, being improved for one set of data, will maintain that improvement for all others. On the contrary, the mind must be regarded as a well-nigh infinite multitude of special capacities or habits or functions, each of which is related closely to only a few others and is related to the majority hardly at all. Any one of these by being trained alters the rest only here and there and to a moderate degree. The so-called 'faculty psychology' has thus been replaced by a psychology asserting the existence of thousands of separate functions, the dependence of which upon each other has been grossly exaggerated.

The two cases that follow will illustrate the relative independence of mental functions and the improbability of much improvement of one from the training given to another.

That a boy is at the head of one hundred of his age in remembering such a series of words as: River, water, brook, flow, ice, cold, winter, sled, snow, skate, by no means implies that he will be near the head of the hundred in the ability to remember such a series as: red, dog, by, day, tree, never, sick, boy, song. On the contrary he will tend to be only a short distance above the average. That one acquires double his original accuracy in judging the lengths of lines one-half to one and a half inches long implies practically no improvement in the accuracy of his estimates of lines six to twelve inches long.

The slight influence which special training seems to have upon general ability is most significant for the theory of college and high-school teaching, which has in the past half century been so exclusively disciplinary. However, in the so-called sense-training, the plays of observation and the constructive activities of the kindergarten, there is always a temptation to sacrifice other desirable ends in the supposed interest of general mental train-

ing and to expect such training in large measure as a result of matching sticks or hunting for balls or the like. As a general rule the sacrifice is unnecessary and the expectation unfulfilled. Plays that are valuable in and of themselves will commonly be more valuable than others for disciplinary purposes; the improvement in general capacity manifested by trained over untrained minds is commonly due to the fact that those trained were at the start a superior selection.

The facts upon which these brief paragraphs are based are too technical and too extensive to be made clear or emphatic in the present paper, but they certainly warrant kindergarten leaders in discouraging present or future emphasis upon any supposed vague disciplinary value attached to the exercises of the kindergarten. Thus is emphasized anew the advisability of limiting our hopes and measuring our attainments in education by definite, observable, particular changes.

Suggestion

The information about the psychology of ideo-motor action and suggestion, which has accumulated during the past score of years, possesses meaning for education more as an explanation of the rationale of practical procedures already in use by proficient teachers, than as a guide to new educational activities. I may merely note here that the basal fact is that the idea of being or doing a thing tends within certain limits to result in a realization of the state or action. That is, the real puzzle for psychology is not, 'Why does thinking of an act make us perform it?' but, 'Why do we ever keep from performing it?' The tendency is always in favor of positive performance; only by the presence of inhibiting ideas and habits are we kept in a constant balance of desire, aversion, hesitation and delay. Different individuals, the same individuals at different ages, and the same individuals under different conditions, vary in the degree to which ideas in them thus tend to act themselves out. In general, the younger children are, the more susceptible they are to suggestion because their systems of inhibitory ideas are fewer and less active. Practically the problem of suggestion is so to present ideas that they will not waken inhibitory systems. Some of the commonest means of doing this are (1) to make the child think that he himself chose

the act, or thought of doing it; (2) to make him attentive to the pleasant aspect of the act and neglectful of the opposite; (3) to insert the idea as a non-essential or minor issue, the attention being diverted to something else; (4) to impress the idea of the act by mere repetition.

Modern Means of Measuring Mental Traits

Very recent studies both of the mathematical theory of phenomena due to the co-action of a great number of small causes and of the actual facts of the variability of human individuals in mental traits, have given results which are not without promise of meaning to the practical work of educating young children. These results are, I regret, not capable of being presented with any adequacy to readers unfamiliar with the elements of the theory of psychological measurements. They replace the common and extremely misleading discussions of individual differences by a complete account of the means of measuring them, precise descriptions of them in the case of some traits, and a probable explanation of their causation. The variety of the natural endowments and propensities of children is shown to be as subject to natural law and as regular in its phenomena as any other fact in human nature. The facts so far known make it likely that in the future the individual peculiarities of any child may be a help rather than a hindrance to wise provision for his training; they, together with recent work in the measurements of mental traits in general, give hints of a time when the growth of every important mental trait in a child will be measured as accurately and noted as frequently and zealously as we now measure and note a baby's growth in weight. These results also make necessary a revision of the whole treatment of mental abnormalities. They show all the attempts to describe minds as copies, sometimes perfect, sometimes faulty, of a pattern mind, the structure and development of which are constants, to be as vain as attempts to describe all living forms as normal or abnormal copies of 'the animal.' They provide instead accurate and definite descriptions of any degree of eccentricity, be it more or less rare.

Psychology is passing, and education will soon pass, from the condition of a descriptive to that of a quantitative science. The human mind is being given the quantitative study by exact

measurements which has long characterized astronomy, physics and chemistry. The education of a human child will sometime be treated with the respect and care that we now give to recording eclipses or measuring the brightness of stars. The best service to be done by early education, for instance by that of the kindergarten, will then probably be considered the accurate measurement of the mental powers and tendencies of children, and the accurate recording of their progress. At present this is possible in the case of the sense powers, motor ability, the perceptive and associative processes, and some of the more definite and mechanical of the other mental traits. Needless to say, however, such measurements are quite beyond the capacity of kindergarten teachers. It requires as much scientific training to observe and measure complex mental traits as to be an astronomical or physical observer. It would be folly to impute to kindergartners the duty of becoming psychological experts. The leaders of the kindergarten, however, may in wisdom master the elements of quantitative psychology and watch its development in the hope of a day when human thought will give its best, exact quantitative science, to the problems of human life and welfare.

So much for psychological facts of special meaning to kindergartners. It will, of course, be understood that the exact extent to which any particular kindergarten will follow any of the suggestions that have been made will, to use the words of our introduction, "depend upon the limitations of time, equipment and teaching staff, and upon the nature of the other forces in the environment of the child which it has to counteract or assist." No single curriculum, for instance, could possibly be the best for all kindergartens, no single method could possibly be the best for all kindergartners. To use the time-honored phrase, every kindergarten is confronted more by concrete conditions than by abstract theories. Very great freedom should be allowed to kindergartners in the conduct of their work, provided only that they are individually capable and so educated as really to deserve professional rank.

Some of my readers may have been disappointed at the absence in this article so far of any sweeping statements about the mind in general. "Has psychology no general theory of the mind to offer us, no simple set of broad propositions describing

its nature and method of action?" Such sweeping statements can be made by psychology and it is unquestionable that the student of the actual detailed facts of the mind's life is the one who should be preferred as their author. The very fact, however, that psychological experts commonly refrain from making them, and leave the task in the presumably less competent hands of metaphysical or educational theorists, signifies that there is some good reason for this restraint. The fact seems to be that any general statement about the mind which thereby abstracts from its concrete details and differentiæ, is so vague that it is likely to mislead into extravagant views those who do not possess all the concrete knowledge on which it is based. It will also commonly be so poor in content that for practice it will be almost empty of meaning. For instance, we might truly say that the growth of the mind is not only an individual but a social matter. But I venture to assert that the interpretations given this statement by my readers would only rarely satisfy Professors Royce and Baldwin, who have been leaders in emphasizing this truth, and also that any educational implications that can be drawn from it will be due not to the general statement itself but to the concrete particulars which gave rise to it. The case may appear clearer and be less likely to awaken misunderstanding and opposition if we use biology rather than psychology as the science in question. The chief generalizations of biology are that living forms grow, reproduce and vary. What value to agriculture or to the domestication and breeding of animals or to preventive medicine attaches to these statements? What degree of insight do they give into the laws of life to one who is unfamiliar with the concrete data and inductions of embryology, physiology, variation and evolution?

The value of any general statement lies in its power to summarize briefly a host of particular facts, to serve as a short-hand for thought. So long as a general statement really contains in itself the particular information, there is nothing but gain, but when its wideness of application depends upon the omission of fact after fact of the realities with which it is concerned, there may be a net loss. No one of us would give up even a minor law of physics or psychology for such perfection of general application and at the same time of barrenness as the following: "There where there is no longer a where, therefore here, there,

and yet again nowhere; then when there is no longer a when, therefore, yesterday, to-day and yet again at no time; was, is and will be the will."

The actual facts and the profitable generalizations representing them I have presented so far as the purpose of this paper, the requirements of space and the limits of my own capacity have permitted. The construction of sweeping statements about the mind *in advance* of the facts is, to some of us at least, one of the most seductive and stimulating of intellectual efforts, but the ethics of science forbid their publication as educational laws.

I shall now mention briefly some of the tendencies in kindergarten work which seem especially hopeful in the light of the psychological facts so far presented and of the more general knowledge of human nature which we all possess. They are:

The increase of out-door play even at great sacrifice.

The arrangement of the room, seating and daily program to suit the body of a child, not the mind of a mystic.

The increase of large movements and of free play.

Systematic efforts to remedy bodily and mental defects.

The acceptance of uniform calmness and matter-of-fact treatment as the ideal in kindergarten management, rather than restless zeal or lofty sentiment.

Widening the range of movements and, as a result, relieving the monotony of one type of motor exercise carried too far.

Reducing to a minimum the tendency to have children make things that are pretty, fanciful, and astonishing by the intricacy of their design.

Discarding all efforts to teach abstractions which can be realized only with the help of the maturity and knowledge reached at or near adolescence.

Limiting the amount of information taught to concrete characteristics of real things, especially to the simpler activities of the children's natural and social environment, such as the brook, the sea shore, the growth of plants, the house being built, the grocery store and the railroad station.

In so far as the information is given not by the objects themselves but by the teacher's words or conduct, selecting it from reputable sources and not from the fancies of professional liars. Older students can protect themselves against fiction presented

as facts. If accuracy is needed anywhere in education it is in teaching defenseless children, who have no criterion for truth beyond what we at the time give.

The prevention of merely verbal knowledge by arrangements for the actual examination of the object or activity whenever possible.

Emphasis on the function rather than on the structure or form of things.

Putting less stress on the cultivation of interests in sentimental interpretations of life and in make-believe and in the technique of workmanship; putting more stress on interests in the actual things of life itself, in actual service to others.

Emphasizing ideals of energy, self-control and bravery more, those of sentiment less.

Making as a chief duty of childhood the establishment of worthy habits, especially of obedience, self-help, cheerfulness, modesty and courage.

In general all changes toward omitting from kindergarten procedure all features which can be economically taught only at a later age, which aim at parade and display, at a specious attractiveness in the eyes of the visitor, who says, 'How nice'; toward widening child education to fit child nature and adapting the kindergarten into harmony with and usefulness to the whole of the educational process.

That there has been a real and measurable change in these particular respects and in the general attitude of kindergartners toward their work even within the past decade will not be doubted by any one who has followed the actual life of kindergartens or who will read kindergarten literature from 1880 on. For the sake of others I print here two tables of contents, one from a representative kindergarten journal, dated May, 1889; the other, again from a representative journal, dated September, 1901. These were taken quite at random, and so represent the changes fairly. For the same purpose the reader may compare the two sets of excerpts which I reprint from these two issues and from pairs of reports of a kindergarten association ten years apart.

"The Kindergarten," June, 1889.	"Kindergarten Magazine," Sept., 1901.
Frontispiece, Feeding the Doves.	Frontispiece, Huxley on a Liberal Education quoted.

Symptoms of Schoolishness.
Raindrops.
Imitation.
Impressions of a Song.
Letters from Frederick Froebel.
On the Educational Principles of Slöjd.
Boston Letter.
Typical Lessons for Mothers and Kindergartners. (An account of a very silly lesson on seeds.)
Miss Harrison at Milwaukee.
The Pea Blossom. (One of Hans Christian Andersen's Stories, weakened and moralized.)
Science Teaching.
On the Use of Clay.
The La Porte Exhibit.
A Child's Question (A little poem).

The remainder of the number is made up of general notes on kindergarten work.

Quotations from "The Kindergarten," May, 1889.

"The little girl, in her daily life with her doll, is seeking to understand mother-love that protects, comforts and guides those dependent upon it. The boy at six, with his rocking-horse, is trying to understand what God meant when he gave man dominion over the beasts of the field."

"The child cannot play he is

Department of Kindergarten Education and Child Study at the National Educational Association at Detroit. (Pages 1-36.) (This contains a summary of papers on 'Work and Play in the Kindergarten,' a Discussion of 'The Theory of Play,' an address on 'The Work of the Kindergarten in the South,' a paper on 'Rhythm in the Kindergarten,' an address by a school superintendent on 'The Position of the Kindergarten in Public Education.')
The Observation of Normal Kindergarten Students in Special Schools, (pages 36-45).
Singing Games and their Sources, (46-51).
The remainder of the number is taken up with notes on the Kindergarten throughout the country.

Quotations from "The Kindergarten Magazine," Sept., 1901.

"I think if you will respond to a measure of this responsibility you will once in a while administer those gifts in an unorthodox way; I think you will say the same inventive problem is before you as is before the future of the kindergarten, and I think you will say you are ready to declare the kindergarten can make no person

a cat chasing a mouse without cultivating in him a murderous tendency. In contrast, he cannot play he is a little worm crawling on the ground, then sleeping all the long winter, to wake up in the spring a beautiful butterfly without gaining a sympathy with something usually thought distasteful, and a presentiment of patience that is willing to wait through the dreary winter, if only it may find its wings at last."

"So he comes to feel, without being told, that back of all visible results there is a great, all-controlling force—that there is no chance, but a great plan that is working on, though it may be in the dark."

"Froebel speaks of the cube as the mother of all form and the aspiration of all form; and it is a curious fact that crystals show a relation to the cube's six faces, eight corners and twelve edges, since the number of faces of a natural crystal is always six, eight or twelve, or a multiple of one of these numbers."

"The derivation of some crystal forms from the cube is very well shown by Prof. Richard's Crystallographic Transformations for the Zoetrope, which, though simple, are very suggestive."

"This contrivance, notwithstanding its high-sounding appellation, is a little toy which will delight the heart of any child, and which will be found in every kindergarten. Its use will be the first step in the child's study of crystallography."

"Froebel's kindergarten is the only system of education which fits the child for the next step, and that step is the primary school. The kindergarten is the only place where the child is free to develop himself. The primary teacher is the first person who fixes the judgment and tells you 'This may'st thou do' and 'that thou must not do.' We want the teacher to be led by the little child. In the ideal system of kindergartens the teacher should be at liberty to study the child, to be guided by the great principles of the kindergarten, and always ready to use and devise materials which are not the result of some man's or woman's mind, but the result of the child, and the child's activities. Oh, how glad I am when I see one who ventures to look upon the roses, the vegetables, the shovel, the hoe and the natural things of life, as much as upon the cubes, the cylinders and squares of paper; when there will be no more virtue in the product of Milton Bradley & Co. and E. Steiger & Co. than there is in the stuff that God grows upon our playground."

"The program of the kindergarten will be the reproduction and development of the children's out-of-door activities and interests in and about Chautauqua, showing somewhat the life, growth and changes in water, woods and farm."

"Different groups of children will do some educative work or participate in plays and games with the children of the Elementary Vacation School, out of doors, nearly every day."

pellation, may be obtained from Milton Bradley & Co., Springfield, Mass., for the small sum of twenty-five cents."

"Then the tree was covered with clusters of tiny red flowers. How happy it was, as it stood in the sunshine with its beautiful red dress."

"You must not think it was an idle tree. Oh, no! It had a great deal of work to do, for was it not a great deal of work to suck up enough food from the earth to keep all those flowers alive and make them strong, so that they could also do their work? Yes, the flowers had to do work."

"She directed them to fold the papers in the following manner: Fold the paper in half so that it looks like an oblong. Open and fold in half the other way. Open and turn over. Fold the opposite corners together so that it looks like a triangle. Open and fold the other corners together. Now put the paper near the middle of the table, out of your way."

"Then the little pea said, 'I will go wherever the Great Father sends me to do his work.' He was put into the pea-shooter and away he flew, up against an old board, under the garret window, and fell into a little crevice which was almost filled up with moss and

"We all need rewards more or less to hold us to our true work."

"It seems to me that where we undertake to drill children into doing things, into folding certain geometrical forms, and doing that sort of thing, then you all have a right to criticize that kind of work."

"The child with his limited experience, in his analogy, always makes one *thing* stand for another *thing*. To him the lily is a cup — to an adult the lily may be the symbol of purity."

"The figure of speech, metaphor, the analogies of the adult whereby a *thing* suggests consciously a spiritual idea — these are beyond the child's power and necessity."

"Analogies should never be forced on a child; they depend upon experience."

soft earth. The moss closed around him and he was shut in, but not forgotten by God."

"It is of the utmost importance that, from the beginning, children should learn that 'beauty is the harmony of differences.'"

"The children do much with the square tile, analyzing it with the help of the style and brush, adorning it elaborately, finding in it and obtaining from it the circle, the octagon, and all imaginable regular polygons. The cube is similarly treated, and yields a great wealth of desired forms—of useful objects, of fancy, of crystals, and the like."

Quotations from Brooklyn Kindergarten Association, Report of 1892.

"*The Kindergarten Gifts,*
as they are called, consisting of the ball, cube, cylinder, etc., furnish an endless variety of entertainment and instruction. Through them the children become expert in the use of their hands and fingers; they learn effects and combinations of form and color, practical arithmetic and the principle of geometry; the power of observation is constantly cultivated, and the reasoning faculties developed.

The Occupations
consist of modeling, embroider-

Quotations from Brooklyn Kindergarten Association, Report of 1900.

"The kindergartner, as she earnestly and patiently labors in one field year after year, longs to see the practical outcome of ideals presented to children and parents, which ideals she strives to exemplify in her own life. This report endeavors to state those cases where the kindergartners have seen the most obvious results."

"A number of gardens have been made this year. The children themselves have helped to clear away rubbish, and have planted bulbs, plants and seeds, tended them with great care,

ing, paper cutting, folding, weaving, drawing, etc., by means of clay, colored paper, soaked peas, and sticks or wires. Through these kinds of work the eye and hand receive thorough and careful training; form and color are constantly studied; habits of neatness, order, and economy are acquired. The occupations are by no means mere fancy work, and so to consider them is a fatal mistake. There is a

Philosophic Principle

underlying everything which the child makes, and the true kindergartner, by the application of these principles, secures, logically and thoroughly, the physical, intellectual, social, and moral development of the child."

and have sent flowers into the homes of the children who were ill — and even to church for Sunday services. One little child spoke of them as 'our lovely flowers,' and she knelt lovingly and caressed each fragrant blossom."

"The children have been brought into sympathy with trade-life by visits to blacksmith, carpenter and baker, and have met with the greatest consideration from the men in shops."

There is of course no single book or few books which can provide the kindergartner with all the psychology she can use. We should not expect a physicist to provide in a few popular books the means of applying physics to architecture, nor in the case of a chemist, the means of applying chemistry to industry. In both cases one must first know the general foundations of the science, must know in detail the particular aspect of it which is to be applied and finally the application. The case of the application of psychology to the education of young children is the same in principle, the difference being that the science is less advanced and so less easily applied. It would be deception to give any promise that the casual reading of a few years would serve one better in the case of psychology than in the case of physics or chemistry. One needs intellectual capacity and good opportunities as truly as and, I believe, as much in the one case as in the others.

Of course even a little learning is on the whole more a helpful than a dangerous thing, especially if we are modest in our expectations. A few hundred hours of work in physics, or in chemistry or in psychology are desirable, though naturally it will in no one of these cases amount to much. More work will always amount to more.

The wise kindergartner who wishes to become grounded in psychology will, if she has access to university or college privileges, take regular courses in psychology. In cases where systematic oversight and examination of one's work is out of question, the following books are perhaps the most convenient means for English readers to a study on psychology and its relation to kindergarten work:

ELEMENTARY AND INTRODUCTORY BOOKS

Baldwin, *Story of the Mind.*
Ladd, *Primer of Psychology.*
Stratton, *Experimental Psychology and Its Bearing upon Culture.*
Thorndike, *Human Nature Club.*
Titchener, *Primer of Psychology.*

GENERAL BOOKS

James, *Briefer Course in Psychology.*
Stout, *Manual of Psychology.*
Witmer, *Analytical Psychology.*

SYSTEMATIC TEXT-BOOKS

James, *Principles of Psychology.*
Külpe, *Outlines of Psychology.*
Ladd, *Psychology, Descriptive and Explanatory.*
Titchener, *Experimental Psychology.*
Wundt, *Physiologische Psychologie.*

SPECIAL BOOKS ON EDUCATIONAL PSYCHOLOGY AND CHILD PSYCHOLOGY

Bain, *Education as a Science.*
Groos, *Play of Man.*

Holt, *Care and Feeding of Children.*
Holt, *Diseases of Childhood.*
James, *Talks to Teachers on Psychology.*
Kirkpatrick, *Fundamentals of Child Study.*
Morgan, *Habit and Instinct.*
Morgan, *Psychology for Teachers.*
Oppenheim, *Care of the Child.*
Thorndike, *Notes on Child Study.*
Thorndike, *Educational Psychology.*
Tracy, *Psychology of Childhood.*

Any one who has really mastered the subject-matter and done with insight the experiments suggested by, say, two volumes from each of the above groups, should be able to read with independent judgment any article upon kindergarten theory and practice from the psychological point of view, and to deal successfully with books and articles representing the results of special studies. These can be found in the annual bibliographies of psychology.

In comparison with inborn capacity and the general training given by life as a whole, one or two years of special training plays so slight a rôle in the preparation of a kindergartner for her work that it does not perhaps make much difference how we distribute this special training. From another point of view, however, the slight amount of special training may be thought the best of reasons for so distributing it as to get the utmost advantage. We may combine both points of view if we say that it is the duty of kindergarten training schools to make that apportionment of the time and effort of their students which seems likely to fit them best for their work, but not to expect any year or so of training to be more than a fractional determinant of that efficiency in which natural capacity and general training have by far the lion's share.

Without entering at all into the general problem of professional courses for kindergartners, it may be said of the position of psychology in any such course, that if there at all it should be there in the shape of reputable science taught from a standard book with standard experiments; that if it is to be specialized at all it should be in the direction not of metaphysical arguments, but of dynamic psychology (the psychology of mental changes) or of child psychology. As to the desirability of its being a part of a kindergarten course at all, it is sure that knowledge, as rep-

resented by science and history, should have a larger place than opinion, as represented by philosophy, literature and pedagogy; that some one of the mental sciences should be represented; that for the general purposes of life and the especial ends of their profession, kindergartners will probably profit more from psychology or logic than from economics or sociology.

The courses of study in kindergarten training schools have already been a subject of consideration by kindergarten leaders, who are presumably better fitted than outsiders to propose alterations. It may be hoped that they will submit the courses in the principles or theory or philosophy of the kindergarten to a careful scrutiny. If there are principles of the kindergarten that are not the principles of human knowledge in general, it is high time that they were eliminated; if the principles of the kindergarten are selected from the recognized body of human knowledge it would be clearer and more attractive to state their sources.

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Teachers College is the professional school of Columbia University for the study of education and the training of teachers. The purpose of the College is to afford opportunity, both theoretical and practical, for the training of teachers of both sexes for elementary, secondary, and normal schools, of specialists in various branches of school work, and of principals, supervisors, and superintendents of schools.

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PUBLISHED BY
THE COLUMBIA UNIVERSITY PRESS
Columbia University, New York
THE MACMILLAN COMPANY, AGENTS
66 Fifth Avenue, New York

Bi-Monthly except July
Vol. IV, No. 5
$1.00 a year
30 cts. a copy

Entered as Second-Class Matter at the New York, N.Y., Post Office, June 11, 1901
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Teachers College Record

Edited by DEAN JAMES E. RUSSELL

TEACHERS COLLEGE RECORD is a serial publication issued by Teachers College, Columbia University, for the purpose of presenting to students of Education, and to the public generally, a comprehensive view of the history and principles of education, of educational administration, and of the theory and practice of teaching as advocated and followed by Teachers College and its schools of observation and practice.

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Soon after the November issue of the TEACHERS COLLEGE RECORD, dealing with "The Philosophy and Psychology of the Kindergarten," by Professor Edward L. Thorndike and Dr. John A. MacVannel, of Teachers College, there will be a number dealing with "Kindergarten Teaching and Training, as Related to Primary Work," under the direction of Professor Mary Duncan Runyan, of Teachers College. The January number will deal with "Music in the Schools," by Professor Charles H. Farnsworth and Miss Mari R. Hofer; the March number with the "Curriculum of the Primary School," by Superintendent Samuel T. Dutton and Principal Henry C. Pearson, and the issue for May with "Experimental Work in Elementary Schools," by Professor Frank M. McMurry and others.

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